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**U.S. Army  
Environmental  
Center**

**Revised Final  
Phase I Environmental Investigation Report,  
Fort Benjamin Harrison,        Volume II of II  
Marion County, Indiana**

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- B PCB SCREENING OF SURFACE SOIL

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- C INVESTIGATIVE SAMPLES ANALYTICAL RESULTS
- D BACKGROUND SAMPLES ANALYTICAL RESULTS
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- L HISTORICAL MILITARY SITE PHOTOGRAPHS
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Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**Appendix C**

**INVESTIGATIVE SAMPLES ANALYTICAL RESULTS**

**Table C1: Explanation of Qualifiers and Flags Applied to Analytical Results**

Qualifier/ Flag	Explanation
/?	Control chart either not received or not yet approved by the Army; qualifier applied during Army data review
b	Value is undetected because of method blank contamination; flag applied during independent data validation
B	Analyte detected in the associated method blank or quality control blank as well as the sample; flag applied by laboratory
C	Analysis was confirmed
D	Duplicate analysis
F	Sample filtered prior to analysis
/I	The low-spike recovery is high; qualifier applied during Army data review
j	Value is estimated; flag applied during independent data validation
/J	The low-spike recovery is low; qualifier applied during Army data review
J	The value is estimated
/K	Reported results are affected by interferences or high background; qualifier applied during Army data review
K	Missed holding times for extraction and preparation; qualifier applied during Army data review
/L	Missed holding time for sample analysis; qualifier applied during Army data review
/M	The high-spike recovery is high; qualifier applied during Army data review
/N	The high-spike recovery is low; qualifier applied during Army data review
P	The value is less than the reporting limit, but greater than instrument detection limit
/R	Value is unacceptable; qualifier applied during Army data review
R	Nontarget compound analyzed for and detected (non-gas chromatography/mass spectrometry [GC/MS] method)
rr	Value was found unacceptable during independent data validation
S	Nontarget compound analyzed for and detected (gas chromatography/mass spectrometry methods)
x	Analyte recovery outside of certified range but within acceptable limits

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001SB001 2 12/16/93	E1001SB001 4 12/16/93	E1001SB001 7.5 12/16/93	E1001SB001-DUP 2.5 12/16/93
Analytes				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01 D
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01 D
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	.0079 S	.008 S	.0068 DS
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01 D
1,1-Dichloroethane	< .01	< .01	< .01	< .01 D
1,1-Dichloroethene	< .01	< .01	< .01	< .01 D
1,2-Dichloroethane	< .01	< .01	< .01	< .01 D
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01 D
1,2-Dichloropropane	< .01	< .01	< .01	< .01 D
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01 D
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01 D
Acetone	.014	< .01	< .01	< .01 D
Benzene	< .01	< .01	< .01	< .01 D
Bromodichloromethane	< .01	< .01	< .01	< .01 D
Bromoform	< .01	< .01	< .01	< .01 D
Bromomethane	< .01	< .01	< .01	< .01 D
Carbon disulfide	< .01	< .01	< .01	< .01 D
Carbon tetrachloride	< .01	< .01	< .01	< .01 D
Chlorobenzene	< .01	< .01	< .01	< .01 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C2. EI Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	EI001SB001	EI001SB001	EI001SB001	EI001SB001-DUP
Depth (feet):	2	4	7.5	2.5
Sample Date:	12/16/93	12/16/93	12/16/93	12/16/93
Analytes				
-----				
Volatiles Organic Compounds				
Chloroethane	< .01	< .01	< .01	< .01 D
Chloroform	< .01	< .01	< .01	< .01 D
Chloromethane	< .01	< .01	< .01	< .01 D
Dibromochloromethane	< .01	< .01	< .01	< .01 D
Ethylbenzene	< .01	< .01	< .01	< .01 D
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01 D
Methylene chloride	< .01	< .01	< .01	< .01 D
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01 D
Methylisobutyl ketone	< .01	< .01	< .01	< .01 D
Styrene	< .01	< .01	< .01	< .01 D
Tetrachloroethene	< .01	< .01	< .01	< .01 D
Toluene	< .01	< .01	< .01	< .01 D
Trichloroethene	< .01	< .01	< .01	< .01 D
Vinyl chloride	< .01	< .01	< .01	< .01 D
Xylenes, total combined	< .01	< .01	< .01	< .01 D
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01 D
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01 D
Metals				
Aluminum	6030	5430	3880	5660 D
Antimony	< 5	< 5	< 5	< 5 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB001	E1001SB001	E1001SB001-DUP
Depth (feet):	2	4	2.5
Sample Date:	12/16/93	12/16/93	12/16/93
<hr/>			
Analytes			
<hr/>			
Metals			
Arsenic	7	6.56	16
Barium	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5
Calcium	95000	101000	97400
Chromium	9.15	9.16	10.1
Cobalt	5.68	7.13	3.17
Copper	17.4	17	11.1
Cyanide	< .25	< .25	< .25
Iron	12700	12400	10600
Lead	6.6	< 5	< 5
Magnesium	32400	32800	28300
Manganese	336	328	204
Mercury	< .1	< .1	< .1
Nickel	19.7	19.2	13.6
Potassium	788	860	657
Selenium	< .25	< .25	< .25
Silver	< .5	< .5	< .5
Sodium	417	419	419

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. EI Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB001	E1001SB001	E1001SB001-DUP
Depth (feet):	2	4	2.5
Sample Date:	12/16/93	12/16/93	12/16/93
-----			
Analytes			
-----			
Metals			
Thallium	34.8	29.4	34 D
Vanadium	15.1	13.6	12.5 D
Zinc	44	40.7	36.2 D
Landfill Parameters			
Diesel Fuel	< 8	< 8	< 8 D
Gasoline	< 8	< 8	< 8 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. EI Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	EI001SB002 3 12/16/93	EI001SB002 5 12/16/93	EI001SB002 9 12/16/93	EI001SB003 10 12/15/93
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	NA
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	NA
1,1,2-Trichloro-1,2,2-trifluoroethane	.01 S	NA	.0068 S	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	NA
1,1-Dichloroethane	< .01	< .01	< .01	NA
1,1-Dichloroethene	< .01	< .01	< .01	NA
1,2-Dichloroethane	< .01	< .01	< .01	NA
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	NA
1,2-Dichloropropane	< .01	< .01	< .01	NA
2-Chloroethylvinyl ether	< .01	< .01	< .01	NA
Acetic acid, vinyl ester	< .01	< .01	< .01	NA
Acetone	.019	< .01	< .01	NA
Benzene	< .01	< .01	< .01	NA
Bromodichloromethane	< .01	< .01	< .01	NA
Bromoform	< .01	< .01	< .01	NA
Bromomethane	< .01	< .01	< .01	NA
Carbon disulfide	< .01	< .01	< .01	NA
Carbon tetrachloride	< .01	< .01	< .01	NA
Chlorobenzene	< .01	< .01	< .01	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001SB002 3 12/16/93	E1001SB002 5 12/16/93	E1001SB002 9 12/16/93	E1001SB003 10 12/15/93
Analytes				
-----				
Volatile Organic Compounds				
Chloroethane	< .01	< .01	< .01	NA
Chloroform	< .01	< .01	< .01	NA
Chloromethane	< .01	< .01	< .01	NA
Dibromochloromethane	< .01	< .01	< .01	NA
Ethylbenzene	< .01	< .01	< .01	NA
Methyl-N-butyl ketone	< .01	< .01	< .01	NA
Methylene chloride	< .01	< .01	< .01	NA
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	NA
Methylisobutyl ketone	< .01	< .01	< .01	NA
Styrene	< .01	< .01	< .01	NA
Tetrachloroethene	< .01	< .01	< .01	NA
Toluene	< .01	< .01	< .01	NA
Trichloroethene	< .01	< .01	< .01	NA
Vinyl chloride	< .01	< .01	< .01	NA
Xylenes, total combined	< .01	< .01	< .01	NA
cis-1,3-Dichloropropene	< .01	< .01	< .01	NA
trans-1,3-Dichloropropene	< .01	< .01	< .01	NA
Metals				
Aluminum	7670	5560	6390	5970
Antimony	< 5	< 5	< 5	< 5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. EI Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:		EI001SB002	EI001SB002	EI001SB002	EI001SB003
Depth (feet):		3	5	9	10
Sample Date:		12/16/93	12/16/93	12/16/93	12/15/93
Analytes					
-----					
Metals					
Arsenic	11	8.5	5.93	2.93	
Barium	93.8	< 39.8	52.5	< 39.8	
Beryllium	< .5	< .5	< .5	< .5	
Cadmium	< .5	< .5	< .5	< .5	
Calcium	57200	101000	83200	86700	
Chromium	12.6	9.07	9.24	10.6	
Cobalt	6.86	4.88	6.61	3.83	
Copper	19.5	14.7	16	13.5	
Cyanide	< .25	< .25	< .25	< .25	
Iron	16000	12500	13700	12400	
Lead	7.89	5.78	< 5	< 5	
Magnesium	29700	29500	28500	25900	
Manganese	389	215	353	225	
Mercury	< .1	< .1	< .1	< .1	
Nickel	24	17	18.2	16.9	
Potassium	652	975	1250	1240	
Selenium	< .25	< .25	< .25	< .25	
Silver	< .5	< .5	< .5	< .5	
Sodium	481	431	410	473	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB002	E1001SB002	E1001SB002	E1001SB003
Depth (feet):	3	5	9	10
Sample Date:	12/16/93	12/16/93	12/16/93	12/15/93
Analytes				
Metals				
Thallium	36.6	31.7	37.6	36
Vanadium	20.6	14.7	18.2	15.8
Zinc	48.1	45.4	43.3	40.5
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	< 8
Gasoline	< 8	< 8	< 8	< 8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001SB003 2 12/15/93	E1001SB003 4 12/15/93	E1001SB004 2 12/21/93	E1001SB004 4 12/21/93
Analytes				
-----				
Volatiles Organic Compounds				
1,1,1-Trichloroethane	NA	NA	< .01	< .01
1,1,2,2-Tetrachloroethane	NA	NA	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	< .01	< .01
1,1-Dichloroethane	NA	NA	< .01	< .01
1,1-Dichloroethene	NA	NA	< .01	< .01
1,2-Dichloroethane	NA	NA	< .01	< .01
1,2-Dichloroethenes (cis & trans)	NA	NA	< .01	< .01
1,2-Dichloropropane	NA	NA	< .01	< .01
2-Chloroethylvinyl ether	NA	NA	< .01	< .01
Acetic acid, vinyl ester	NA	NA	< .01	< .01
Acetone	NA	NA	.026	.037
Benzene	NA	NA	< .01	< .01
Bromodichloromethane	NA	NA	< .01	< .01
Bromoform	NA	NA	< .01	< .01
Bromomethane	NA	NA	< .01	< .01
Carbon disulfide	NA	NA	< .01	< .01
Carbon tetrachloride	NA	NA	< .01	< .01
Chlorobenzene	NA	NA	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C2. EI Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB003	E1001SB003	E1001SB004	E1001SB004
Depth (feet):	2	4	2	4
Sample Date:	12/15/93	12/15/93	12/21/93	12/21/93
Analytes				
-----				
Volatile Organic Compounds				
Chloroethane	NA	NA	< .01	< .01
Chloroform	NA	NA	< .01	< .01
Chloromethane	NA	NA	< .01	< .01
Dibromochloromethane	NA	NA	< .01	< .01
Ethylbenzene	NA	NA	< .01	< .01
Methyl-N-butyl ketone				
Methylene chloride	NA	NA	< .01	< .01
Methylethyl ketone/2-Butanone	NA	NA	< .01	< .01
Methylisobutyl ketone	NA	NA	< .01	< .01
Styrene	NA	NA	< .01	< .01
Tetrachloroethene				
Toluene	NA	NA	< .01	< .01
Trichloroethene	NA	NA	< .01	< .01
Vinyl chloride	NA	NA	< .01	< .01
Xylenes, total combined	NA	NA	< .01	< .01
cis-1,3-Dichloropropene				
trans-1,3-Dichloropropene	NA	NA	< .01	< .01
Metals				
Aluminum	11000	23100	13400	14800
Antimony	< 5	< 5	< 5	< 5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001S8003	E1001S8003	E1001S8004	E1001S8004
Depth (feet):	2	4	2	4
Sample Date:	12/15/93	12/15/93	12/21/93	12/21/93
Analytes				
-----				
Metals				
Arsenic	4.49	7.95	4.15	9.9
Barium	291	231	122	105
Beryllium	< .5	.949	.683	.962
Cadmium	< .5	< .5	< .5	< .5
Calcium	3520	4620	6710	21000
Chromium	15.8	28.2	18.3	21
Cobalt	9.59	11.8	8.41	6.78
Copper	14.6	21.8	17.1	19.7
Cyanide	< .25	< .25	< .25	< .25
Iron	18200	28200	18300	21000
Lead	52.2	17.9	20.7	14.8
Magnesium	2310	4870	4510	14800
Manganese	692	538	427	333
Mercury	< .1	< .1	< .1	< .1
Nickel	14.6	32.1	24.4	24.7
Potassium	983	1280	1170	1730
Selenium	.413	< .25	.476	< .25
Silver	< .5	< .5	< .5	< .5
Sodium	388	551	500	506

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB003	E1001SB003	E1001SB004	E1001SB004
Depth (feet):	2	4	2	4
Sample Date:	12/15/93	12/15/93	12/21/93	12/21/93
Analytes				
Metals				
Thallium	25.5	41	< 10	< 10
Vanadium	31.6	51.3	32.9	34.5
Zinc	77.7	76.9	59.8	67.8
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	14.4
Gasoline	< 8	< 8	< 8	< 8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001SB004 6 12/21/93	E1001SB005 2.5 12/19/93	E1001SB005 4 12/19/93	E1001SB005 6 12/19/93
Analytes				
-----				
Volatiles Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	.023	< .01	.027	< .01
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001SB004 6 12/21/93	E1001SB005 2.5 12/19/93	E1001SB005 4 12/19/93	E1001SB005 6 12/19/93
Analytes				
Volatile Organic Compounds				
Chloroethane	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01
Metals				
Aluminum	7670	25300	21600	5180
Antimony	< 5	< 5	< 5	< 5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001S8004	E1001S8005	E1001S8005	E1001S8005
Depth (feet):	6	2.5	4	6
Sample Date:	12/21/93	12/19/93	12/19/93	12/19/93
Analytes				
Metals				
Arsenic	9.3	15	10	6.8
Barium	55.8	139	216	< 39.8
Beryllium	.733	< .5	.889	< .5
Cadmium	< .5	< .5	< .5	< .5
Calcium	98800	3910	3940	96800
Chromium	11.2	30.3	28	9.46
Cobalt	6.05	11.6	14	5.74
Copper	15.1	21.5	21.6	14.6
Cyanide	< .25	< .25	< .25	< .25
Iron	14000	30300	29200	13500
Lead	< 5	11.7	16.5	6.53
Magnesium	27900	3910	5080	34900
Manganese	360	290	1070	372
Mercury	< .1	< .1	< .1	< .1
Nickel	17.4	20.2	34.3	18
Potassium	1630	1390	1400	856
Selenium	< .25	.619	< .25	< .25
Silver	< .5	< .5	< .5	< .5
Sodium	453	530	623	428

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB004	E1001SB005	E1001SB005	E1001SB005
Depth (feet):	6	2.5	4	6
Sample Date:	12/21/93	12/19/93	12/19/93	12/19/93
Analytes				
Metals				
Thallium	16.3	34.1	39.4	29.3
Vanadium	20.9	50.5	45.7	13.5
Zinc	41.9	65.7	82.6	45
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	< 8
Gasoline	< 8	< 8	< 8	< 8

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB005-DUP	E1001SB03A	E1001SB03A	E1001SB03A
Depth (feet):	3.5	2	4	9
Sample Date:	12/19/93	01/24/94	01/24/94	01/24/94
<b>Analytes</b>				
-----				
<b>Volatile Organic Compounds</b>				
1,1,1-Trichloroethane	< .01 D	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01 D	< .01	< .01	< .01
1,1,2-Trichlor-1,2,2-trifluoroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01 D	< .01	< .01	< .01
1,1-Dichloroethane	< .01 D	< .01	< .01	< .01
1,1-Dichloroethene	< .01 D	< .01	< .01	< .01
1,2-Dichloroethane	< .01 D	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01 D	< .01	< .01	< .01
1,2-Dichloropropane	< .01 D	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01 D	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01 D	< .01	< .01	< .01
Acetone	.028 D	.031	< .01	< .01
Benzene	< .01 D	< .01	< .01	< .01
Bromodichloromethane	< .01 D	< .01	< .01	< .01
Bromoform	< .01 D	< .01	< .01	< .01
Bromomethane	< .01 D	< .01	< .01	< .01
Carbon disulfide	< .01 D	< .01	< .01	< .01
Carbon tetrachloride	< .01 D	< .01	< .01	< .01
Chlorobenzene	< .01 D	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001S8005-DUP 3.5 12/19/93	E1001S803A 2 01/24/94	E1001S803A 4 01/24/94	E1001S803A 9 01/24/94
Analytes				
Volatile Organic Compounds				
Chloroethane	< .01 D	< .01	< .01	< .01
Chloroform	< .01 D	< .01	< .01	< .01
Chloromethane	< .01 D	< .01	< .01	< .01
Dibromochloromethane	< .01 D	< .01	< .01	< .01
Ethylbenzene	< .01 D	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01 D	< .01	< .01	< .01
Methylene chloride	< .01 D	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01 D	< .01	< .01	< .01
Methylisobutyl ketone	< .01 D	< .01	< .01	< .01
Styrene	< .01 D	< .01	< .01	< .01
Tetrachloroethene	< .01 D	< .01	< .01	< .01
Toluene	< .01 D	< .01	< .01	< .01
Trichloroethene	< .01 D	< .01	< .01	< .01
Vinyl chloride	< .01 D	< .01	< .01	< .01
Xylenes, total combined	< .01 D	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01 D	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01 D	< .01	< .01	< .01
Metals				
Aluminum	19100 D	NA	NA	NA
Antimony	< 5 D	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB005-DUP	E1001SB03A	E1001SB03A	E1001SB03A
Depth (feet):	3.5	2	4	9
Sample Date:	12/19/93	01/24/94	01/24/94	01/24/94
Analytes				
Metals				
Arsenic	13 D	NA	NA	NA
Barium	166 D	NA	NA	NA
Beryllium	.879 D	NA	NA	NA
Cadmium	< .5 D	NA	NA	NA
Calcium	4200 D	NA	NA	NA
Chromium	26.8 D	NA	NA	NA
Cobalt	9.81 D	NA	NA	NA
Copper	25.5 D	NA	NA	NA
Cyanide	< .25 D	NA	NA	NA
Iron	31800 D	NA	NA	NA
Lead	14 D	NA	NA	NA
Magnesium	4460 D	NA	NA	NA
Manganese	548 D	NA	NA	NA
Mercury	< .1 D	NA	NA	NA
Nickel	29.3 D	NA	NA	NA
Potassium	1170 D	NA	NA	NA
Selenium	.713 D	NA	NA	NA
Silver	< .5 D	NA	NA	NA
Sodium	586 D	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C2. E1 Site 1: Auto Craft Shop, Building 705  
Subsurface Soil Samples Analytical Results

Sample Name:	E1001SB005-DUP	E1001SB03A	E1001SB03A	E1001SB03A
Depth (feet):	3.5	2	4	9
Sample Date:	12/19/93	01/24/94	01/24/94	01/24/94
Analytes				
-----				
Metals				
Thallium	36.9 D	NA	NA	NA
Vanadium	45.9 D	NA	NA	NA
Zinc	80.3 D	NA	NA	NA
Landfill Parameters				
Diesel Fuel	< 8 D	NA	NA	NA
Gasoline	< 8 D	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table C3. EI Site 1: Auto Craft Shop, Building 705  
Groundwater Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001MW001 8.5 02/02/94	E1001MW001-DUP 8.5 02/02/94	E1001MW002 8.5 02/02/94	E1001MW003 8.5 02/03/94	E1001MW004 8 02/03/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2 D	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2 D	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2 D	< 2	< 2	< 2
2-Chloroethylvinyl ether	< 10	< 10 D	< 10	< 10	< 10
Acetic acid, vinyl ester	< 10	< 10 D	< 10	< 10	< 10
Acetone	< 10	< 10 D	< 10	< 10	< 10
Benzene	< 2	< 2 D	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2 D	< 2	< 2	< 2
Bromoform	< 2	< 2 D	< 2	< 2	< 2
Bromomethane	< 2	< 2 D	< 2	< 2	< 2
Carbon disulfide	< 10	< 10 D	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2 D	< 2	< 2	< 2
Chlorobenzene	< 2	< 2 D	< 2	< 2	< 2
Chloroethane	< 10	< 10 D	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table C3. E1 Site 1: Auto Craft Shop, Building 705  
Groundwater Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1001MW001 8.5 02/02/94	E1001MW001-DUP 8.5 02/02/94	E1001MW002 8.5 02/02/94	E1001MW003 8.5 02/03/94	E1001MW004 8 02/03/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2 D	< 2	< 2	< 2
Chloromethane	< 2	< 2 D	< 2	< 2	2 JP
Dibromochloromethane	< 2	< 2 D	< 2	< 2	< 2
Ethylbenzene	< 2	< 2 D	< 2	< 2	< 2
Methyl-N-butyl ketone	< 10	< 10 D	< 10	< 10	< 10
Methylene chloride	< 10	< 10 D	< 10	< 10	< 10
Methylethyl ketone/2-Butanone	< 10	< 10 D	< 10	< 10	< 10
Methylisobutyl ketone	< 10	< 10 D	< 10	< 10	< 10
Styrene	< 2	< 2 D	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2 D	< 2	< 2	< 2
Toluene	< 2	< 2 D	< 2	< 2	< 2
Trichloroethene	< 2	< 2 D	< 2	< 2	< 2
Vinyl chloride	< 2	< 2 D	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10 D	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2 D	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2 D	< 2	< 2	< 2
Landfill Parameters					
Diesel Fuel	< .4	< .4 D	< .4	< .4	< .4
Gasoline	< .4	< .4 D	< .4	< .4	< .4

Note: Results are reported in micrograms per liter (ug/L).

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C4. E1 Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name:	E1003S8001	E1003S8001	E1003S8001	E1003S8002
Depth (feet):	1	12.5	6.5	1
Sample Date:	11/30/93	11/30/93	11/30/93	12/01/93
<hr/>				
Analytes				
<hr/>				
Volatiles Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
<hr/>				
1,2,4-Trimethylcyclohexane	NA	NA	NA	NA
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
1-Ethyl-2-methylbenzene	NA	NA	NA	NA
<hr/>				
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01
2-Methylheptane	NA	NA	NA	NA
3-Methyloctane	NA	NA	NA	NA
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01
<hr/>				
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1003SB001 1 11/30/93	E1003SB001 12.5 11/30/93	E1003SB001 6.5 11/30/93	E1003SB001-DUP 5.5 11/30/93	E1003SB002 1 12/01/93
Analytes					
-----					
Volatiles Organic Compounds					
Bromomethane	< .01	< .01	< .01	< .01 D	< .01
Carbon disulfide	< .01	< .01	< .01	< .01 D	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01 D	< .01
Chlorobenzene	< .01	< .01	< .01	< .01 D	< .01
Chloroethane	< .01	< .01	< .01	< .01 D	< .01
Chloroform	< .01	< .01	< .01	< .01 D	< .01
Chloromethane	< .01	< .01	< .01	< .01 D	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01 D	< .01
Ethylbenzene	< .01	< .01	< .01	< .01 D	< .01
Ethylcyclohexane	NA	NA	NA	NA	NA
Heptane	NA	NA	NA	NA	NA
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01 D	< .01
Methylene chloride	< .01	< .01	< .01	< .01 D	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01 D	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01 D	< .01
Octane	NA	NA	NA	NA	NA
Styrene	< .01	< .01	< .01	< .01 D	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01 D	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name:	EI003SB001	EI003SB001	EI003SB001	EI003SB002
Depth (feet):	1	12.5	6.5	1
Sample Date:	11/30/93	11/30/93	11/30/93	12/01/93
Analytes				
-----				
Volatile Organic Compounds				
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
-----				
o,p-Xylene	NA	NA	NA	NA
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01
-----				
Metals				
Aluminum	9270	4070	12600 /L	12400
Antimony	< 5 /J	< 5 /J	< 5 /LJ	< 5
Arsenic	9.8	4.3	7.5	7.5 /I
Barium	80.5	< 39.8	86.8 /L	70
Beryllium	< .5	< .5	< .5 /L	.675
-----				
Cadmium	< .5	< .5	< .5 /L	< .5
Calcium	30500	110000	26400 /L	17500
Chromium	12.2	7.07	16.4 /L	16.3 /J
Cobalt	8.78	4.07	8.43 /L	7.5
Copper	19.5	11.8	20.1 /L	20 /IR
-----				
Cyanide	< .25	< .25	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name:	E1003SB001	E1003SB001	E1003SB001	E1003SB001-DUP	E1003SB002
Depth (feet):	1	12.5	6.5	5.5	1
Sample Date:	11/30/93	11/30/93	11/30/93	11/30/93	12/01/93
-----					
Analytes					
-----					
Metals					
Iron	17100	9220	18900 /L	16200 D	18800
Lead	58.5	6	88.1 /L	54.8 D	87.5
Magnesium	12100	20400	12200 /L	2620 D	8880
Manganese	646	354	491 /L	286 D	413
Mercury	< .1	< .1	< .1	< .1 D	< .1
-----					
Nickel	22	10.7	18.9 /L	18.7 D	18.8
Potassium	915	772	1510 /L	1490 D	1500
Selenium	< .25	< .5	.579	.448 D	< .25
Silver	< .5	< .5	< .5 /L	< .5 D	< .5
Sodium	354	386	403 /L	386 D	363
-----					
Thallium	18.3	26.8	20.1 /L	< 10 D	< 10
Vanadium	23.2	8.68	30.2 /L	31.1 D	30 /JR
Zinc	62.2	34.3	64.2 /L	58.5 D	80
-----					
Landfill Parameters					
Diesel Fuel	NA	NA	NA	NA	< 8 /L
Diesel fuel	< 8	< 8	< 8	121 D	NA
Gasoline	< 8	< 8	< 8	33.6 D	< 8 /L

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. E1 Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1003SB002 4.5 12/01/93	E1003SB002 8 12/01/93	E1003SB003 1 12/01/93	E1003SB003 5 12/01/93	E1003SB003 9 12/01/93
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .05
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .05
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .05
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .05
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .05
1,2,4-Trimethylcyclohexane	NA	NA	NA	NA	1 S
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .05
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .05
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .05
1-Ethyl-2-methylbenzene	NA	NA	NA	NA	1 S
2-Chloroethyl(vinyl ether	< .01	< .01	< .01	< .01	< .05
2-Methylheptane	NA	NA	NA	NA	.6 S
3-Methyloctane	NA	NA	NA	NA	1 S
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .05
Acetone	< .01	< .01	< .01	< .01	< .05
Benzene	< .01	< .01	< .01	< .01	.06 JP
Bromodichloromethane	< .01	< .01	< .01	< .01	.1
Bromoform	< .01	< .01	< .01	< .01	< .05

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. El Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name:	E1003SB002	E1003SB002	E1003SB003	E1003SB003	E1003SB003
Depth (feet):	4.5	8	1	5	9
Sample Date:	12/01/93	12/01/93	12/01/93	12/01/93	12/01/93
<b>Analytes</b>					
-----					
<b>Volatile Organic Compounds</b>					
Bromomethane	< .01	< .01	< .01	< .01	< .05
Carbon disulfide	< .01	< .01	< .01	< .01	< .05
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .05
Chlorobenzene	< .01	< .01	< .01	< .01	< .05
Chloroethane	< .01	< .01	< .01	< .01	< .05
Chloroform	< .01	< .01	< .01	< .01	< .05
Chloromethane	< .01	< .01	< .01	< .01	< .05
Dibromochloromethane	< .01	< .01	< .01	< .01	< .05
Ethylbenzene	< .01	< .01	< .01	< .01	< .05
Ethylcyclohexane	NA	NA	NA	NA	1 S
Heptane	NA	NA	NA	NA	.6 S
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .05
Methylene chloride	< .01	< .01	< .01	< .01	< .05
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .05
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .05
Octane	NA	NA	NA	NA	2 S
Styrene	< .01	< .01	< .01	< .01	< .05
Tetrachloroethene	< .01	< .01	< .01	< .01	< .05

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	EI003S8002 4.5 12/01/93	EI003S8002 8 12/01/93	EI003S8003 1 12/01/93	EI003S8003 5 12/01/93	EI003S8003 9 12/01/93
<b>Analytes</b>					
<b>-----</b>					
<b>Volatile Organic Compounds</b>					
Toluene	< .01	< .01	< .01	< .01	.2
Trichloroethene	< .01	< .01	< .01	< .01	< .05
Vinyl chloride	< .01	< .01	< .01	< .01	< .05
Xylenes, total combined	< .01	< .01	< .01	< .01	1
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .05
<b>-----</b>					
o,p-Xylene	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .05
<b>-----</b>					
<b>Metals</b>					
Aluminum	10300	9230	11800	13200	6780
Antimony	< 5	< 5	< 5	< 5	< 5
Arsenic	7.2 /I	6.9 /I	4.7 /I	4.8 /I	4.5 /I
Barium	59.8	57.7	320	87.8	< 39.8
Beryllium	< .5	< .5	.627	< .5	< .5
Cadmium	< .5	< .5	.864	< .5	< .5
Calcium	31100	66900	18900	34900	106000
Chromium	13.2 /J	13.8 /J	16.6 /J	18.1 /J	11.2 /J
Cobalt	6.34	6.23	33.1	7.34	5.76
Copper	15.6 /IR	17.3 /IR	18.9 /IR	16.8 /IR	15.8 /IR
Cyanide	< .25	< .25	< .25	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1003S8002 4.5 12/01/93	E1003S8002 8 12/01/93	E1003S8003 1 12/01/93	E1003S8003 5 12/01/93	E1003S8003 9 12/01/93
Analytes					
Metals					
Iron	15600	16100	29600	18100	13600
Lead	62.2	34.6	48.5	40.9	6.55
Magnesium	11000	20800	8050	13200	28200
Manganese	383	323	4380	481	316
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	15.6	17.3	26	18.1	18.1
Potassium	1090	1500	1150	1560	1360
Selenium	< .25	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	287	415	663	674	463
Thallium	< 10	15	< 10	< 10	18.1
Vanadium	25.1 /JR	21.9 /JR	36.7 /JR	33.7 /JR	16.9 /JR
Zinc	65.8	63.4	93.5	65	46.3
Landfill Parameters					
Diesel Fuel	< 8 /L	< 8 /L	< 8 /L	< 8 /L	21 /L
Diesel fuel	NA	NA	NA	NA	NA
Gasoline	< 8 /L	< 8 /L	< 8 /L	< 8 /L	34.1 /L

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name:	EI003SB004	EI003SB004	EI003SB004	EI003SB005	EI003SB005
Depth (feet):	1	11	5	1.5	5
Sample Date:	12/03/93	12/03/93	12/03/93	11/20/93	11/20/93
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2,4-Trimethylcyclohexane	NA	NA	NA	NA	NA
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
1-Ethyl-2-methylbenzene	NA	NA	NA	NA	NA
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
2-Methylheptane	NA	NA	NA	NA	NA
3-Methyloctane	NA	NA	NA	NA	NA
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01	.014
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01 R	< .01 R

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name:	E1003S8004	E1003S8004	E1003S8004	E1003S8005
Depth (feet):	1	11	5	5
Sample Date:	12/03/93	12/03/93	12/03/93	11/20/93
<hr/>				
Analytes				
<hr/>				
Volatile Organic Compounds				
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01
<hr/>				
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Ethylcyclohexane	NA	NA	NA	NA
<hr/>				
Heptane	NA	NA	NA	NA
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01
<hr/>				
Octane	NA	NA	NA	NA
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	EI003S8004 1 12/03/93	EI003S8004 11 12/03/93	EI003S8004 5 12/03/93	EI003S8005 1.5 11/20/93	EI003S8005 5 11/20/93
<b>Analytes</b>					
<b>-----</b>					
<b>Volatiles Organic Compounds</b>					
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	NA	NA
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
<b>-----</b>					
o,p-Xylene	NA	NA	NA	< .01 R	< .01 R
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
<b>Metals</b>					
Aluminum	5870	7080	6260	3800	8110
Antimony	< 5	< 5	< 5	< 5 /J	< 5 /J
Arsenic	5.2 /I	4.6 /I	4.7 /I	22	7
Barium	57.4	< 39.8	50.8	< 39.8	54.5
Beryllium	< .5	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	52200	106000	30700	86800	83400
Chromium	9.26 /J	11.4 /J	9.69 /J	6.72	12.7
Cobalt	6.65	5.37	5.2	3.58	5.45
Copper	16.9 /IR	14.8 /IR	13 /IR	11.9	26.7
Cyanide	< .25	< .25	< .25	< .25	< .25

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1003SB004 1 12/03/93	E1003SB004 11 12/03/93	E1003SB004 5 12/03/93	E1003SB005 1.5 11/20/93	E1003SB005 5 11/20/93
Analytes					
Metals					
Iron	13000	13700	13000	9650	16200
Lead	37.8	7.08	22.5	15.2	35.9
Magnesium	24800	29700	11100	32500	19700
Manganese	482	320	319	390	348
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	14.3	19.4	14.2	9.44	16.2
Potassium	1100	1260	875	781	1070
Selenium	< .25	< .25	< .25	< .5	.301
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	378	445	307	325	429
Thallium	16.9	14.8	< 10	23.9	27.8
Vanadium	15.6 /JR	14.8 /JR	17.7 /JR	10.8	19.7
Zinc	62.6	44.5	43.7	44.5	61.4
Landfill Parameters					
Diesel Fuel	< 8	< 8	< 8	< 8	79.6
Diesel fuel	NA	NA	NA	NA	NA
Gasoline	< 8	< 8	< 8	< 8	< 8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: EI003S8005  
Depth (feet): 9.5  
Sample Date: 11/20/93

Analytes	
-----	
Volatile Organic Compounds	
1,1,1-Trichloroethane	< .01
1,1,2,2-Tetrachloroethane	< .01
1,1,2-Trichloroethane	< .01
1,1-Dichloroethane	< .01
1,1-Dichloroethene	< .01
1,2,4-Trimethylcyclohexane	NA
1,2-Dichloroethane	< .01
1,2-Dichloroethenes (cis & trans)	< .01
1,2-Dichloropropane	< .01
1-Ethyl-2-methylbenzene	NA
2-Chloroethylvinyl ether	< .01
2-Methylheptane	NA
3-Methyloctane	NA
Acetic acid, vinyl ester	< .01
Acetone	< .01
Benzene	< .01
Bromodichloromethane	< .01
Bromoform	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: E1003S8005  
Depth (feet): 9.5  
Sample Date: 11/20/93

Analytes	
-----	
Volatile Organic Compounds	
Bromomethane	< .01
Carbon disulfide	< .01
Carbon tetrachloride	< .01
Chlorobenzene	< .01
Chloroethane	< .01
Chloroform	< .01
Chloromethane	< .01
Dibromochloromethane	< .01
Ethylbenzene	< .01
Ethylcyclohexane	NA
Heptane	NA
Methyl-N-butyl ketone	< .01
Methylene chloride	< .01
Methylethyl ketone/2-Butanone	< .01
Methylisobutyl ketone	< .01
Octane	NA
Styrene	< .01
Tetrachloroethene	< .01

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C4. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: E1003S8005  
Depth (feet): 9.5  
Sample Date: 11/20/93

Analytes

Volatile Organic Compounds

Toluene < .01  
Trichloroethene < .01  
Vinyl chloride < .01  
Xylenes, total combined < .01  
cis-1,3-Dichloropropene < .01

o,p-Xylene

NA  
trans-1,3-Dichloropropene < .01

Metals

Aluminum 7650  
Antimony < 5 /J  
Arsenic 6.7  
Barium 57.4  
Beryllium < .5  
Cadmium < .5  
Calcium 97900  
Chromium 10.8  
Cobalt 5.85  
Copper 14.6  
Cyanide < .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C4. E1 Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Subsurface Soil Samples Analytical Results

Sample Name: E1003SB005  
Depth (feet): 9.5  
Sample Date: 11/20/93

Analytes	
-----	
Metals	
Iron	12400
Lead	6.3
Magnesium	31500
Manganese	315
Mercury	< .1
Nickel	16.9
Potassium	1800
Selenium	< .25
Silver	< .5
Sodium	450
Thallium	28.1
Vanadium	18
Zinc	43.9
Landfill Parameters	
Diesel Fuel	< 8
Diesel fuel	NA
Gasoline	< 8

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C5. EI Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Groundwater Samples Analytical Results

Sample Name:	E1003MW001	E1003MW002	E1003MW003	E1003MW004
Depth (feet):	9.5	6.4	9	16
Sample Date:	02/16/94	02/16/94	02/16/94	02/16/94
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2
2-Chloroethyl(vinyl ether	< 10 rr	< 10 rr	< 10	< 10 rr
Acetic acid, vinyl ester	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are listed in Table C1

Table C5. E1 Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Groundwater Samples Analytical Results

Sample Name:	E1003MW001	E1003MW002	E1003MW003	E1003MW004
Depth (feet):	9.5	6.4	9	16
Sample Date:	02/16/94	02/16/94	02/16/94	02/16/94
<b>Analytes</b>				
-----				
<b>Volatile Organic Compounds</b>				
Chloroethane	< 10	< 10	< 10	< 10
Chloroform	< 2	4.3	< 2	< 2
Chloromethane	< 2 j	< 2 j	< 2	< 2 j
Dibromochloromethane	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2
Methyl-N-butyl ketone	< 10	< 10	< 10	< 10
Methylene chloride	< 10 j	< 10 j	< 10	< 10 j
Methylethyl ketone/2-Butanone	< 10 rr	< 10 rr	< 10	< 10 rr
Methylisobutyl ketone	< 10 j	< 10 j	< 10	< 10 j
Styrene	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2
<b>Landfill Parameters</b>				
Diesel fuel	< .4	< .4	< .4	< .4

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are listed in Table C1

Table C5. E1 Site 3: Former Post Exchange  
Gasoline Station, Building 619  
Groundwater Samples Analytical Results

Sample Name:	E1003MW001	E1003MW002	E1003MW003	E1003MW004
Depth (feet):	9.5	6.4	9	16
Sample Date:	02/16/94	02/16/94	02/16/94	02/16/94

Analytes

Landfill Parameters  
Gasoline

< .4                      < .4                      < .4                      < .4

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are Listed in Table C1



Table C6. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
PCB Screening Samples Analytical Results

Sample Name:	E1004PCB11	E1004PCB19	E1004PCB26
Depth (feet):	1	.8	0
Sample Date:	11/19/93	11/19/93	11/19/93
-----			
Analytes			
-----			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	.0712 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	.0776 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.0598 C
Aldrin	< .003	< .003	.0117 C
Dieldrin	< .003	< .003	.0802 C
Endosulfan sulfate	< .003	< .003	< .003
Endrin	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	.00445 C
Lindane	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C6. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
PCB Screening Samples Analytical Results

Sample Name:	E1004PCB11	E1004PCB19	E1004PCB26
Depth (feet):	1	.8	0
Sample Date:	11/19/93	11/19/93	11/19/93
<hr/>			
Analytes			
<hr/>			
Pesticides/PCBs			
PCB 1254	< .013	< .013	< .013
PCB 1260	< .013	< .013	.0763 C
Toxaphene	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	.0916 C
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	.098 C

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB001 3 12/16/93	E1004SB001 5 12/16/93	E1004SB001 7 12/16/93	E1004SB002 1 12/18/93
Analytes				
-----				
Volatiles Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	.016	.014	< .01	< .01
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	EI004SB001	EI004SB001	EI004SB001	EI004SB002
Depth (feet):	3	5	7	1
Sample Date:	12/16/93	12/16/93	12/16/93	12/18/93
Analytes				
-----				
Volatile Organic Compounds				
Chlorobenzene	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	.083
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB001 3 12/16/93	E1004SB001 5 12/16/93	E1004SB001 7 12/16/93	E1004SB002 1 12/18/93
Analytes				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< 3
1,2-Dichlorobenzene	< .14	< .14	< .14	< 3
1,3-Dichlorobenzene	< .14	< .14	< .14	< 3
1,4-Dichlorobenzene	< .14	< .14	< .14	< 3
2,4,5-Trichlorophenol	< .3	< .3	< .3	< 6
2,4,6-Trichlorophenol	< .3	< .3	< .3	< 6
2,4-Dichlorophenol	< .14	< .14	< .14	< 3
2,4-Dimethylphenol	< .14	< .14	< .14	< 3
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4	< 30
2,4-Dinitrotoluene	< .14	< .14	< .14	< 3
2,6-Dinitrotoluene	< .14	< .14	< .14	< 3
2-Chloronaphthalene	< .14	< .14	< .14	< 3
2-Chlorophenol	< .14	< .14	< .14	< 3
2-Methylnaphthalene	< .14	< .14	< .14	< 3
2-Methylphenol	< .14	< .14	< .14	< 3
2-Nitroaniline	< .67	< .67	< .67	< 10
2-Nitrophenol	< .14	< .14	< .14	< 3
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< 10

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB001	E1004SB001	E1004SB001	E1004SB002
Depth (feet):	3	5	7	1
Sample Date:	12/16/93	12/16/93	12/16/93	12/18/93
<b>Analytes</b>				
-----				
<b>Semivolatile Organic Compounds</b>				
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< 3
3-Nitroaniline	< .67	< .67	< .67	< 10
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 30
4-Bromophenylphenyl ether	< .14	< .14	< .14	< 3
4-Chloroaniline	< .3	< .3	< .3	< 6
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< 3
4-Methylphenol	< .14	< .14	< .14	< 3
4-Nitroaniline	< .67	< .67	< .67	< 10
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 30
Acenaphthene	< .14	< .14	< .14	< 3
Acenaphthylene	< .14	< .14	< .14	< 3
Anthracene	< .14	< .14	< .14	< 3
Benzo[a]anthracene	< .14	< .14	< .14	< 3
Benzo[b]fluoranthene	< .14	< .14	< .14	< 3
Benzo[g,h,i]perylene	< .16	< .16	< .16	< 3
Benzo[k]fluoranthene	< .14	< .14	< .14	< 3
Benzo[a]pyrene	< .14	< .14	< .14	< 3
Benzoic acid	< 1.4	< 1.4	< 1.4	< 30

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	EI004S8001 3 12/16/93	EI004S8001 5 12/16/93	EI004S8001 7 12/16/93	EI004S8002 1 12/18/93
Analytes				
Semivolatile Organic Compounds				
Benzyl alcohol	< .14	< .14	< .14	< 3
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14	< 3
Butylbenzylphthalate	< .14	< .14	< .14	< 3
Carbazole	< .14	< .14	< .14	< 3
Chrysene	< .14	< .14	< .14	< 3
Di-N-butyl phthalate	.23	.86	< .14	< 3
Di-N-octyl phthalate	< .14	< .14	< .14	< 3
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< 3
Dibenzofuran	< .14	< .14	< .14	< 3
Diethylphthalate	< .14	< .14	< .14	< 3
Dimethylphthalate	< .14	< .14	< .14	< 3
Fluoranthene	< .14	< .14	< .14	< 3
Fluorene	< .14	< .14	< .14	< 3
Hexachlorobenzene	< .14	< .14	< .14	< 3
Hexachlorobutadiene	< .14	< .14	< .14	< 3
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 20
Hexachloroethane	< .14	< .14	< .14	< 3
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< 3

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004S8001 3 12/16/93	E1004S8001 5 12/16/93	E1004S8001 7 12/16/93	E1004S8002 1 12/18/93
Analytes				
Semivolatile Organic Compounds				
Isophorone	< .14	< .14	< .14	< 3
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< 3
N-Nitrosodiphenylamine	< .14	< .14	< .14	< 3
Naphthalene	< .14	< .14	< .14	< 3
Nitrobenzene	< .14	< .14	< .14	< 3
Pentachlorophenol	< .67	< .67	< .67	< 10
Phenanthrene	< .14	< .14	< .14	< 3
Phenol	< .14	< .14	< .14	< 3
Pyrene	< .14	< .14	< .14	< 3
Tetradecane	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< 3
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< 3
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< 3
Metals				
Aluminum	7560	5710	4520	4660
Antimony	< 5	< 5	< 5	< 5
Arsenic	3.21	3.09	3.73	6.64
Barium	53.8	< 39.8	< 39.8	85
Beryllium	< .5	< .5	< .5	< .5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data qualifiers are defined in table C1



Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB001 3 12/16/93	E1004SB001 5 12/16/93	E1004SB001 7 12/16/93	E1004SB002 1 12/18/93
Analytes				
Metals				
Cadmium	< .5	< .5	< .5	< .5
Calcium	72200	88000	98400	50100
Chromium	11.5	9.71	8.37	10.4
Cobalt	6.87	6.86	4.07	5.12
Copper	18.3	13.7	14.7	18.6
Cyanide	< .25	< .25	< .25	.355
Iron	21800	14900	13600	15100
Lead	6.19	5.94	< 5	88.5
Magnesium	29800	28600	28300	29100
Manganese	332	377	317	501
Mercury	< .1	< .1	< .1	.233
Nickel	20.6	20.6	17	14
Potassium	710	971	701	407
Selenium	< .25	< .25	< .25	.477
Silver	< .5	< .5	< .5	< .5
Sodium	458	446	419	559
Thallium	38.9	37.7	33.9	34.9
Vanadium	21.8	14.9	13.6	19.8

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB001	E1004SB001	E1004SB001	E1004SB002
Depth (feet):	3	5	7	1
Sample Date:	12/16/93	12/16/93	12/16/93	12/18/93
-----				
Analytes				
-----				
Metals				
Zinc	52.7	44.6	37.3	93.1
-----				
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	82.5
Gasoline	< 8	< 8	< 8	63.1

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB002	E1004SB002	E1004SB002-DUP	E1004SB003
Depth (feet):	17.5	5	5.5	3
Sample Date:	12/18/93	12/18/93	12/18/93	12/17/93
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .05	< .01	< .01 D	< .01
1,1,2,2-Tetrachloroethane	< .05	< .01	< .01 D	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	.0067 DS	NA
1,1,2-Trichloroethane	< .05	< .01	< .01 D	< .01
1,1-Dichloroethane	< .05	< .01	< .01 D	< .01
-----				
1,1-Dichloroethene	< .05	< .01	< .01 D	< .01
1,2-Dichloroethane	< .05	< .01	< .01 D	< .01
1,2-Dichloroethenes (cis & trans)	< .05	< .01	< .01 D	< .01
1,2-Dichloropropane	< .05	< .01	< .01 D	< .01
2-Chloroethylvinyl ether	< .05	< .01	< .01 D	< .01
-----				
Acetic acid, vinyl ester	< .05	< .01	< .01 D	< .01
Acetone	< .05	< .01	.037 D	< .01
Benzene	< .05	< .01	< .01 D	< .01
Bromodichloromethane	< .05	< .01	< .01 D	< .01
Bromoform	< .05	< .01	< .01 D	< .01
-----				
Bromomethane	< .05	< .01	< .01 D	< .01
Carbon disulfide	< .05	< .01	< .01 D	< .01
Carbon tetrachloride	< .05	< .01	< .01 D	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB002	E1004SB002	E1004SB002-DUP	E1004SB003
Depth (feet):	17.5	5	5.5	3
Sample Date:	12/18/93	12/18/93	12/18/93	12/17/93
Analytes				
-----				
Volatiles Organic Compounds				
Chlorobenzene	< .05	< .01	< .01 D	< .01
Chloroethane	< .05	< .01	< .01 D	< .01
Chloroform	< .05	< .01	< .01 D	< .01
Chloromethane	< .05	< .01	< .01 D	< .01
Dibromochloromethane	< .05	< .01	< .01 D	< .01
Ethylbenzene	< .05	< .01	< .01 D	< .01
Methyl-N-butyl ketone	< .05	< .01	< .01 D	< .01
Methylene chloride	< .05	< .01	< .01 D	< .01
Methylethyl ketone/2-Butanone	< .05	< .01	< .01 D	< .01
Methylisobutyl ketone	< .05	< .01	< .01 D	< .01
Styrene	< .05	< .01	< .01 D	< .01
Tetrachloroethene	< .05	< .01	< .01 D	< .01
Toluene	< .05	< .01	< .01 D	< .01
Trichloroethene	1	< .01	.023 D	< .01
Vinyl chloride	< .05	< .01	< .01 D	< .01
Xylenes, total combined	< .05	< .01	< .01 D	< .01
cis-1,3-Dichloropropene	< .05	< .01	< .01 D	< .01
trans-1,3-Dichloropropene	< .05	< .01	< .01 D	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB002	E1004SB002	E1004SB002-DUP	E1004SB003
Depth (feet):	17.5	5	5.5	3
Sample Date:	12/18/93	12/18/93	12/18/93	12/17/93
Analytes				
-----				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14 D	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14 D	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14 D	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14 D	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3 D	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3 D	< .3
2,4-Dichlorophenol	< .14	< .14	< .14 D	< .14
2,4-Dimethylphenol	< .14	< .14	< .14 D	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4 D	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14 D	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14 D	< .14
2-Chloronaphthalene	< .14	< .14	< .14 D	< .14
2-Chlorophenol	< .14	< .14	< .14 D	< .14
2-Methylnaphthalene	< .14	< .14	< .14 D	< .14
2-Methylphenol	< .14	< .14	< .14 D	< .14
2-Nitroaniline	< .67	< .67	< .67 D	< .67
2-Nitrophenol	< .14	< .14	< .14 D	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67 D	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	EI004SB002	EI004SB002	EI004SB002-DUP	EI004SB003
Depth (feet):	17.5	5	5.5	3
Sample Date:	12/18/93	12/18/93	12/18/93	12/17/93
Analytes				
-----				
Semivolatile Organic Compounds				
3-Methyl-4-chlorophenol	< .14	< .14	< .14 D	< .14
3-Nitroaniline	< .67	< .67	< .67 D	< .67
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4 D	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14 D	< .14
4-Chloroaniline	< .3	< .3	< .3 D	< .3
-----				
4-Chlorophenylphenyl ether	< .14	< .14	< .14 D	< .14
4-Methylphenol	< .14	< .14	< .14 D	< .14
4-Nitroaniline	< .67	< .67	< .67 D	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4 D	< 1.4
Acenaphthene	< .14	< .14	< .14 D	< .14
-----				
Acenaphthylene	< .14	< .14	< .14 D	< .14
Anthracene	< .14	< .14	< .14 D	< .14
Benzo[A]anthracene	< .14	< .14	< .14 D	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14 D	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16 D	< .16
-----				
Benzo[K]fluoranthene	< .14	< .14	< .14 D	< .14
Benzo[a]pyrene	< .14	< .14	< .14 D	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4 D	< 1.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB002 17.5 12/18/93	E1004SB002 5 12/18/93	E1004SB002-DUP 5.5 12/18/93	E1004SB003 3 12/17/93
Analytes				
Semivolatile Organic Compounds				
Benzyl alcohol	< .14	< .14	< .14 D	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14 D	< .14
Butylbenzylphthalate	< .14	< .14	< .14 D	< .14
Carbazole	< .14	< .14	< .14 D	< .14
Chrysene	< .14	< .14	< .14 D	< .14
Di-N-butyl phthalate	.61	.53	.27 D	.26
Di-N-octyl phthalate	< .14	< .14	< .14 D	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16 D	< .16
Dibenzofuran	< .14	< .14	< .14 D	< .14
Diethylphthalate	< .14	< .14	< .14 D	< .14
Dimethylphthalate	< .14	< .14	< .14 D	< .14
Fluoranthene	< .14	< .14	< .14 D	< .14
Fluorene	< .14	< .14	< .14 D	< .14
Hexachlorobenzene	< .14	< .14	< .14 D	< .14
Hexachlorobutadiene	< .14	< .14	< .14 D	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1 D	< 1
Hexachloroethane	< .14	< .14	< .14 D	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16 D	< .16

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB002 17.5 12/18/93	E1004SB002 5 12/18/93	E1004SB002-DUP 5.5 12/18/93	E1004SB003 3 12/17/93
Analytes				
Semivolatile Organic Compounds				
Isophorone	< .14	< .14	< .14 D	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14 D	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14 D	< .14
Naphthalene	< .14	< .14	< .14 D	< .14
Nitrobenzene	< .14	< .14	< .14 D	< .14
Pentachlorophenol	< .67	< .67	< .67 D	< .67
Phenanthrene	< .14	< .14	< .14 D	< .14
Phenol	< .14	< .14	< .14 D	< .14
Pyrene	< .14	< .14	< .14 D	< .14
Tetradecane	.34 S	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14 D	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14 D	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14 D	< .14
Metals				
Aluminum	3850	7630	8590 D	9250
Antimony	< 5	< 5	< 5 D	< 5
Arsenic	11	11.2	6.7 D	2.02
Barium	< 39.8	80.2	67 D	166
Beryllium	< .5	< .5	.714 D	1.03

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1



Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB002	E1004SB002	E1004SB002-DUP	E1004SB003
Depth (feet):	17.5	5	5.5	3
Sample Date:	12/18/93	12/18/93	12/18/93	12/17/93
Analytes				
Metals				
Cadmium	< .5	< .5	< .5	.913
Calcium	94100	75100	80400	6170
Chromium	6.92	12.7	12.3	16.6
Cobalt	6.69	8.78	5.92	10.3
Copper	14.7	22.9	15.6	28.5
Cyanide	< .25	< .25	< .25	< .25
Iron	13600	19100	13400	24900
Lead	< 5	8.4	< 5	13
Magnesium	38500	25400	23400	4630
Manganese	272	649	357	866
Mercury	< .1	< .1	< .1	< .1
Nickel	17	31.8	17.9	72.4
Potassium	601	840	1450	866
Selenium	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5
Sodium	454	496	379	415
Thallium	23.8	45.8	< 10	29.7
Vanadium	9.86	25.4	19	28.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB002	E1004SB002	E1004SB002-DUP	E1004SB003
Depth (feet):	17.5	5	5.5	3
Sample Date:	12/18/93	12/18/93	12/18/93	12/17/93
-----				
Analytes				
-----				
Metals				
Zinc	51	70	37.9 D	107
-----				
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8 D	< 8
Gasoline	< 8	< 8	< 8 D	< 8

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB003	E1004SB003	E1004SB004	E1004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	.0077 S
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB003	E1004SB003	E1004SB004	E1004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
Analytes				
-----				
Volatile Organic Compounds				
Chlorobenzene	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	.017	< .01	< .01
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB003	E1004SB003	E1004SB004	E1004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
Analytes				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< .14	< .14	< .14	< .14
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB003	E1004SB003	E1004SB004	E1004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
<b>Analytes</b>				
-----				
Semivolatile Organic Compounds				
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67	< .67	< .67	< .67
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14
Benzo[a]pyrene	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB003 5.5 12/17/93	E1004SB003 6 12/17/93	E1004SB004 20 12/17/93	E1004SB004 3.3 12/17/93
Analytes				
Semivolatile Organic Compounds				
Benzyl alcohol	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	.79	< .14
Butylbenzylphthalate	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	.2	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14
Hexachlorobenzene	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	EI004SB003	EI004SB003	EI004SB004	EI004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
<b>Analytes</b>				
-----				
<b>Semivolatile Organic Compounds</b>				
Isophorone	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14
Pentachlorophenol	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14
Tetradecane	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14
<b>Metals</b>				
Aluminum	5700	5340	2470	16600
Antimony	< 5	< 5	< 5	< 5
Arsenic	2.51	1.63	4.62	10
Barium	50.2	< 39.8	< 39.8	114
Beryllium	< .5	< .5	< .5	.664

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1



Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB003	E1004SB003	E1004SB004	E1004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
Analytes				
-----				
Metals				
Cadmium	< .5	< .5	< .5	< .5
Calcium	98100	88300	103000	3070
Chromium	9.92	10.1	5.26	21.7
Cobalt	5.47	9.06	2.69	17.9
Copper	18.2	22.1	7.73	28.1
Cyanide	< .25	< .25	< .25	< .25
Iron	18200	15100	6770	28100
Lead	5.93	8.48	< 5	15.3
Magnesium	25100	26700	22600	3700
Manganese	468	348	730	460
Mercury	< .1	< .1	< .1	< .1
Nickel	20.5	23.2	8.38	26.8
Potassium	992	976	430	830
Selenium	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5
Sodium	410	395	354	524
Thallium	43.3	38.3	29	35.8
Vanadium	16	16.3	6.12	35.8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB003	E1004SB003	E1004SB004	E1004SB004
Depth (feet):	5.5	6	20	3.3
Sample Date:	12/17/93	12/17/93	12/17/93	12/17/93
Analytes				
-----				
Metals				
Zinc	55.9	53.4	23.6	80.5
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	< 8
Gasoline	< 8	< 8	< 8	< 8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB004 5.5 12/17/93	E1004SB005 1.5 12/18/93	E1004SB005 12 12/18/93	E1004SB005 5.3 12/18/93
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB004	E1004SB005	E1004SB005	E1004SB005
Depth (feet):	5.5	1.5	12	5.3
Sample Date:	12/17/93	12/18/93	12/18/93	12/18/93
Analytes				
-----				
Volatile Organic Compounds				
Chlorobenzene	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004SB004 5.5 12/17/93	E1004SB005 1.5 12/18/93	E1004SB005 12 12/18/93	E1004SB005 5.3 12/18/93
Analytes				
Semivolatiles Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB004	E1004SB005	E1004SB005	E1004SB005
Depth (feet):	5.5	1.5	12	5.3
Sample Date:	12/17/93	12/18/93	12/18/93	12/18/93
<b>Analytes</b>				
-----				
Semivolatile Organic Compounds				
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67	< .67	< .67	< .67
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14
Benzo [A] anthracene	< .14	< .14	< .14	< .14
Benzo [B] fluoranthene	< .14	< .14	< .14	< .14
Benzo [G, H, I] perylene	< .16	< .16	< .16	< .16
Benzo [K] fluoranthene	< .14	< .14	< .14	< .14
Benzo [a] pyrene	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004S8004 5.5 12/17/93	E1004S8005 1.5 12/18/93	E1004S8005 12 12/18/93	E1004S8005 5.3 12/18/93
Analytes				
Semivolatiles Organic Compounds				
Benzyl alcohol	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14	< .14
Butylbenzylphthalate	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	.26	.26	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14
Hexachlorobenzene	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB004	E1004SB005	E1004SB005	E1004SB005
Depth (feet):	5.5	1.5	12	5.3
Sample Date:	12/17/93	12/18/93	12/18/93	12/18/93

Analytes

Semivolatile Organic Compounds

Isophorone	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14

Pentachlorophenol	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14
Tetradecane	NA	NA	NA	NA

bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14

Metals

Aluminum	5520	6810	7440	18800
Antimony	< 5	< 5	< 5	< 5
Arsenic	7.44	4.5	4.6	5
Barium	69.6	46.9	45.8	108
Beryllium	< .5	.636	< .5	1.18

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1



Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB004	E1004SB005	E1004SB005	E1004SB005
Depth (feet):	5.5	1.5	12	5.3
Sample Date:	12/17/93	12/18/93	12/18/93	12/18/93
Analytes				
-----				
Metals				
Cadmium	< .5	< .5	< .5	< .5
Calcium	87600	110000	91500	6400
Chromium	9.6	11.2	11.4	25.1
Cobalt	6	4.91	5.84	8.53
Copper	16.8	12.3	11.4	22.6
Cyanide	< .25	< .25	< .25	< .25
Iron	13200	11200	11200	23800
Lead	6.72	< 5	5.84	16.3
Magnesium	33600	22300	27500	5140
Manganese	552	346	297	389
Mercury	< .1	< .1	< .1	< .1
Nickel	24	15.6	14.9	26.3
Potassium	768	1450	1950	1760
Selenium	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5
Sodium	468	435	412	364
Thallium	34.8	12.3	< 10	< 10
Vanadium	15.6	17.9	17.2	46.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name:	E1004SB004	E1004SB005	E1004SB005	E1004SB005
Depth (feet):	5.5	1.5	12	5.3
Sample Date:	12/17/93	12/18/93	12/18/93	12/18/93
-----				
Analytes				
-----				
Metals				
Zinc	49.2	41.3	34.3	85.3
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	< 8
Gasoline	< 8	< 8	< 8	< 8

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

EI004SB005-DUP

5.8

12/18/93

Sample Name:

Depth (feet):

Sample Date:

Analytes

-----  
Volatile Organic Compounds

1,1,1-Trichloroethane	< .01 D
1,1,2,2-Tetrachloroethane	< .01 D
1,1,2-Trichloro-1,2,2-trifluoroethane	NA
1,1,2-Trichloroethane	< .01 D
1,1-Dichloroethane	< .01 D

1,1-Dichloroethene	< .01 D
1,2-Dichloroethane	< .01 D
1,2-Dichloroethenes (cis & trans)	< .01 D
1,2-Dichloropropane	< .01 D
2-Chloroethylvinyl ether	< .01 D

Acetic acid, vinyl ester	< .01 D
Acetone	< .01 D
Benzene	< .01 D
Bromodichloromethane	< .01 D
Bromoform	< .01 D

Bromomethane	< .01 D
Carbon disulfide	< .01 D
Carbon tetrachloride	< .01 D

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004SB005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes	
-----	
Volatile Organic Compounds	
Chlorobenzene	< .01 D
Chloroethane	< .01 D
Chloroform	< .01 D
Chloromethane	< .01 D
Dibromochloromethane	< .01 D
Ethylbenzene	
Methyl-N-butyl ketone	< .01 D
Methylene chloride	< .01 D
Methylethyl ketone/2-Butanone	< .01 D
Methylisobutyl ketone	< .01 D
Styrene	
Tetrachloroethene	< .01 D
Toluene	< .01 D
Trichloroethene	< .01 D
Vinyl chloride	< .01 D
Xylenes, total combined	
cis-1,3-Dichloropropene	< .01 D
trans-1,3-Dichloropropene	< .01 D

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Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004SB005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes	
-----	
Semivolatile Organic Compounds	
1,2,4-Trichlorobenzene	< .14 D
1,2-Dichlorobenzene	< .14 D
1,3-Dichlorobenzene	< .14 D
1,4-Dichlorobenzene	< .14 D
2,4,5-Trichlorophenol	< .3 D
2,4,6-Trichlorophenol	< .3 D
2,4-Dichlorophenol	< .14 D
2,4-Dimethylphenol	< .14 D
2,4-Dinitrophenol	< 1.4 D
2,4-Dinitrotoluene	< .14 D
2,6-Dinitrotoluene	< .14 D
2-Chloronaphthalene	< .14 D
2-Chlorophenol	< .14 D
2-Methylnaphthalene	< .14 D
2-Methylphenol	< .14 D
2-Nitroaniline	< .67 D
2-Nitrophenol	< .14 D
3,3'-Dichlorobenzidine	< .67 D

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Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004SB005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes

Semivolatile Organic Compounds

3-Methyl-4-chlorophenol < .14 D  
3-Nitroaniline < .67 D  
4,6-Dinitro-2-cresol < 1.4 D  
4-Bromophenylphenyl ether < .14 D  
4-Chloroaniline < .3 D

4-Chlorophenylphenyl ether < .14 D  
4-Methylphenol < .14 D  
4-Nitroaniline < .67 D  
4-Nitrophenol < 1.4 D  
Acenaphthene < .14 D

Acenaphthylene < .14 D  
Anthracene < .14 D  
Benzo[a]anthracene < .14 D  
Benzo[b]fluoranthene < .14 D  
Benzo[g,h,i]perylene < .16 D

Benzo[k]fluoranthene < .14 D  
Benzo[a]pyrene < .14 D  
Benzoic acid < 1.4 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004S8005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes	
-----	
Semivolatile Organic Compounds	
Benzyl alcohol	< .14 D
Bis (2-Ethylhexyl) phthalate	< .14 D
Butylbenzylphthalate	< .14 D
Carbazole	< .14 D
Chrysene	< .14 D
Di-N-butyl phthalate	.2 D
Di-N-octyl phthalate	< .14 D
Dibenzo[A,H]anthracene	< .16 D
Dibenzofuran	< .14 D
Diethylphthalate	< .14 D
Dimethylphthalate	< .14 D
Fluoranthene	< .14 D
Fluorene	< .14 D
Hexachlorobenzene	< .14 D
Hexachlorobutadiene	< .14 D
Hexachlorocyclopentadiene	< 1 D
Hexachloroethane	< .14 D
Indeno[1,2,3-C,D]pyrene	< .16 D

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Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1

Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004SB005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes	
-----	
Semivolatile Organic Compounds	
Isophorone	< .14 D
N-Nitrosodi-N-propylamine	< .14 D
N-Nitrosodiphenylamine	< .14 D
Naphthalene	< .14 D
Nitrobenzene	< .14 D
Pentachlorophenol	< .67 D
Phenanthrene	< .14 D
Phenol	< .14 D
Pyrene	< .14 D
Tetradecane	NA
bis (2-Chloroethoxy) methane	< .14 D
bis (2-Chloroethyl) ether	< .14 D
bis (2-Chloroisopropyl) ether	< .14 D
Metals	
Aluminum	14200 D
Antimony	< 5 D
Arsenic	2.2 D
Barium	91.6 D
Beryllium	.862 D

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1



Table C7. E1 site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004SB005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes	
-----	
Metals	
Cadmium	< .5 D
Calcium	3930 D
Chromium	18.5 D
Cobalt	5.23 D
Copper	19.6 D
Cyanide	< .25 D
Iron	16400 D
Lead	10.4 D
Magnesium	3600 D
Manganese	196 D
Mercury	< .1 D
Nickel	18.5 D
Potassium	1000 D
Selenium	< .25 D
Silver	< .5 D
Sodium	305 D
Thallium	< 10 D
Vanadium	28.4 D

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in table C1

Table C7. EI site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Subsurface Soil Samples Analytical Results

Sample Name: E1004SB005-DUP  
Depth (feet): 5.8  
Sample Date: 12/18/93

Analytes

Metals

Zinc 69.8 D

Landfill Parameters

Diesel Fuel < 8 D  
Gasoline < 8 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table C8. EI Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004MW001 19.5 02/04/94	E1004MW001-DUP 19.5 02/04/94	E1004MW002 21.2 02/06/94	E1004MW003 19.5 02/05/94	E1004MW004 17.5 02/05/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2 D	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2 D	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2 D	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2 D	< 2	< 2	< 2
2-Chloroethylvinyl ether	< 10	< 10 D	< 10	< 10	< 10
Acetic acid, vinyl ester	< 10	< 10 D	< 10	< 10	< 10
Acetone	< 10	< 10 D	< 10	< 10	< 10
Benzene	< 2	< 2 D	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2 D	< 2	< 2	< 2
Bromoform	< 2	< 2 D	< 2	< 2	< 2
Bromomethane	< 2	< 2 D	< 2	< 2	< 2
Carbon disulfide	< 10	< 10 D	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2 D	< 2	< 2	< 2
Chlorobenzene	< 2	< 2 D	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l).

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. EI Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name:	E1004MW001	E1004MW001-DUP	E1004MW002	E1004MW003	E1004MW004
Depth (feet):	19.5	19.5	21.2	19.5	17.5
Sample Date:	02/04/94	02/04/94	02/06/94	02/05/94	02/05/94
<b>Analytes</b>					
<b>-----</b>					
<b>Volatile Organic Compounds</b>					
Chloroethane	< 10	< 10 D	< 10	< 10	< 10
Chloroform	< 2	< 2 D	< 2	< 2	< 2
Chloromethane	< 2	3.1 D	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2 D	< 2	< 2	< 2
Ethylbenzene	< 2	< 2 D	< 2	< 2	< 2
Methyl-N-butyl ketone	< 10	< 10 D	< 10	< 10	< 10
Methylene chloride	< 10	< 10 D	< 10	< 10	< 10
Methylethyl ketone/2-Butanone	< 10	< 10 D	< 10	< 10	< 10
Methylisobutyl ketone	< 10	< 10 D	< 10	< 10	< 10
Styrene	< 2	< 2 D	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2 D	< 2	< 2	< 2
Toluene	< 2	< 2 D	< 2	< 2	< 2
Trichloroethene	< 2	< 2 D	< 2	< 2	< 2
Vinyl chloride	< 2	< 2 D	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10 D	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2 D	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2 D	< 2	< 2	< 2
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< 2	< 2 D	< 2	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. E1 Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004MW001 19.5 02/04/94	E1004MW001-DUP 19.5 02/04/94	E1004MW002 21.2 02/06/94	E1004MW003 19.5 02/05/94	E1004MW004 17.5 02/05/94
Analytes					
Semivolatile Organic Compounds					
1,2-Dichlorobenzene	< 2	< 2 D	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2 D	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2 D	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2 D	< 2	< 2	< 2
2,4,6-Trichlorophenol	< 2	< 2 D	< 2	< 2	< 2
2,4-Dichlorophenol	< 2	< 2 D	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2 D	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30 D	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2 D	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2 D	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2 D	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2 D	< 2	< 2	< 2
2-Methylnaphthalene	< 2	< 2 D	< 2	< 2	< 2
2-Methylphenol	< 2	< 2 D	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10 D	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2 D	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10	< 10 D	< 10	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2 D	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. EI Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name:	E1004MW001	E1004MW001-DUP	E1004MW002	E1004MW003	E1004MW004
Depth (feet):	19.5	19.5	21.2	19.5	17.5
Sample Date:	02/04/94	02/04/94	02/06/94	02/05/94	02/05/94
Analytes					
-----					
Semivolatile Organic Compounds					
3-Nitroaniline	< 10	< 10 D	< 10	< 10	< 10
4,6-Dinitro-2-cresol	< 20	< 20 D	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2 D	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2 D	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2 D	< 2	< 2	< 2
4-Methylphenol	< 2	< 2 D	< 2	< 2	< 2
4-Nitroaniline	< 10	< 10 D	< 10	< 10	< 10
4-Nitrophenol	< 20	< 20 D	< 20	< 20	< 20
Acenaphthene	< 2	< 2 D	< 2	< 2	< 2
Acenaphthylene	< 2	< 2 D	< 2	< 2	< 2
Anthracene	< 2	< 2 D	< 2	< 2	< 2
Benzo[A]anthracene	< 2	< 2 D	< 2	< 2	< 2
Benzo[B]fluoranthene	< 2	< 2 D	< 2	< 2	< 2
Benzo[G,H,I]perylene	< 2	< 2 D	< 2	< 2	< 2
Benzo[K]fluoranthene	< 2	< 2 D	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2 D	< 2	< 2	< 2
Benzoic acid	< 20	< 20 D	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2 D	< 2	< 2	< 2

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Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. E1 Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1004MW001 19.5 02/04/94	E1004MW001-DUP 19.5 02/04/94	E1004MW002 21.2 02/06/94	E1004MW003 19.5 02/05/94	E1004MW004 17.5 02/05/94
Analytes					
Semivolatiles Organic Compounds					
Bis (2-Ethylhexyl) phthalate	< 2	< 2	2.4	2.9	2.8
Butylbenzylphthalate	< 2	< 2	< 2	< 2	< 2
Carbazole	< 2	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2	< 2
Cyclohexanol	NA	NA	NA	NA	20
					S
Di-N-butyl phthalate	< 2	< 2	< 2	< 2	< 2
Di-N-octyl phthalate	< 2	< 2	< 2	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2	< 2
Diethylphthalate	< 2	< 2	< 2	< 2	< 2
Dimethylphthalate	< 2	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	< 2	< 2	< 2	< 2	< 2
Indeno[1,2,3-C,D]pyrene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. E1 Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name:	E1004MW001	E1004MW001-DUP	E1004MW002	E1004MW003	E1004MW004
Depth (feet):	19.5	19.5	21.2	19.5	17.5
Sample Date:	02/04/94	02/04/94	02/06/94	02/05/94	02/05/94

-----  
Analytes

Semi-volatile Organic Compounds

Isophorone	< 2	D	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	D	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	D	< 2	< 2	< 2
Naphthalene	< 2	D	< 2	< 2	< 2
Nitrobenzene	< 2	D	< 2	< 2	< 2
Pentachlorophenol	< 10	D	< 10	< 10	< 10
Phenanthrene	< 2	D	< 2	< 2	< 2
Phenol	< 2	D	< 2	< 2	< 2
Pyrene	< 2	D	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	D	< 2	< 2	< 2
bis (2-Chloroethyl) ether	< 2	D	< 2	< 2	< 2
bis (2-Chloroisopropyl) ether	< 2	D	< 2	< 2	< 2

Metals

Aluminum	14100	5060	D	4190	18400	1240
Aluminum (Filtered)	< 40	F	DF	< 40	F	< 40
Antimony	< 3	D	D	< 3	F	< 3
Antimony (Filtered)	< 3	F	DF	< 3	F	3.3
Arsenic	23.3	D	D	8.4	32.7	18.5
Arsenic (Filtered)	15.5	F	FD	5	F	16

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C8. E1 Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name:	E1004MW001	E1004MW001-DUP	E1004MW002	E1004MW003	E1004MW004
Depth (feet):	19.5	19.5	21.2	19.5	17.5
Sample Date:	02/04/94	02/04/94	02/06/94	02/05/94	02/05/94
Analytes					
Metals					
Barium	211	166 D	75.2	184	50.2
Barium (Filtered)	130 F	122 DF	46.6 F	75.6 F	39 F
Beryllium	< 5	< 5 D	< 5	< 5	< 5
Beryllium (Filtered)	< 5 F	< 5 DF	< 5 F	< 5 F	< 5 F
Cadmium	< 5	< 5 D	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 DF	< 5 F	< 5 F	< 5 F
Calcium	189000	180000 D	177000	254000	243000
Calcium (Filtered)	142000 F	135000 DF	139000 F	99800 F	219000 F
Chromium	31.2	24.2 D	12.3	44	< 10
Chromium (Filtered)	< 10 F	< 10 DF	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20 D	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 DF	< 20 F	< 20 F	< 20 F
Copper	16.8	16.5 D	7.85	45.2	< 5
Copper (Filtered)	< 5 F	< 5 DF	< 5 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5 D	< 2.5	< 2.5	< 2.5
Iron	14700	12500 D	8120	38600	2550
Iron (Filtered)	370 F	411 DF	1130 F	< 45 F	341 F
Lead	6.1	7.3 D	2.6	20.4	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. E1 Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name:	E1004MW001	E1004MW001-DUP	E1004MW002	E1004MW003	E1004MW004
Depth (feet):	19.5	19.5	21.2	19.5	17.5
Sample Date:	02/04/94	02/04/94	02/06/94	02/05/94	02/05/94
<b>Analytes</b>					
-----					
<b>Metals</b>					
Lead (Filtered)	< 2 F	< 2 FD	< 2 F	< 2 F	< 2 F
Magnesium	65000	61700 D	69500	80300	99500
Magnesium (Filtered)	50200 F	47800 DF	57900 F	34100 F	90000 F
Manganese	383 B	371 DB	373	795 B	259 B
Manganese (Filtered)	147 FB	139 DFB	237 F	78.1 FB	195 FB
Mercury	< .2	< .2 D	< .2	< .2	< .2
Mercury (Filtered)	< .2 F	< .2 DF	< .2 F	< .2 F	< .2 F
Nickel	21.1	22.9 D	< 15	43.2	< 15
Nickel (Filtered)	< 15 F	< 15 DF	< 15 F	< 15 F	< 15 F
Potassium	7310	4010 D	10200	6590	3660
Potassium (Filtered)	2220 F	2310 DF	8860 F	1980 F	3020 F
Selenium	< 2.5	< 2.5 D	< 2.5	< 2.5	< 2.5
Selenium (Filtered)	< 2.5 F	< 2.5 DF	< 2.5 F	< 2.5 F	< 2.5 F
Silver	< 5	< 5 D	< 5	< 5	< 5
Silver (Filtered)	< 5 F	< 5 DF	< 5 F	< 5 F	< 5 F
Sodium	26600	25000 D	39600 /1	62600	70200
Sodium (Filtered)	26100 F	24400 DF	38400 F/1	61100 F	66400 F
Thallium	< 2.5	< 2.5 D	< 2.5	< 2.5	< 2.5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C8. E1 Site 4: Directorate of Installation Support  
Engineering/Maintenance, Building 26  
Groundwater Samples Analytical Results

Sample Name:	E1004MW001	E1004MW001-DUP	E1004MW002	E1004MW003	E1004MW004
Depth (feet):	19.5	19.5	21.2	19.5	17.5
Sample Date:	02/04/94	02/04/94	02/06/94	02/05/94	02/05/94
Analytes					
-----					
Metals					
Thallium (Filtered)	< 2.5 F	< 2.5 DF	< 2.5 F	< 2.5 F	< 2.5 F
Vanadium	26.7	10.5 D	< 10	41.4	< 10
Vanadium (Filtered)	< 10 F	< 10 DF	< 10 F	< 10 F	< 10 F
Zinc	44.2	42.3 D	26	145	< 20
Zinc (Filtered)	< 20 F	< 20 DF	< 20 F	< 20 F	< 20 F
Landfill Parameters					
Diesel Fuel	< .4	< .4 D	< .4	< .4	< .4
Gasoline	< .4	< .4 D	< .4	< .4	< .4

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C9. E1 Site 5: Electrical Shop, Building 4  
PCB Screening Samples Analytical Results

Sample Name: E1005PCB10 E1005PCB13  
Depth (feet): 0 0  
Sample Date: 11/18/93 11/18/93

Analytes

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .003 < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .003 < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene < .003 < .003  
Aldrin < .003 < .003  
Dieldrin < .003 < .003

Endosulfan sulfate

Endrin < .003 < .003  
Endrin aldehyde < .022 < .022  
Endrin ketone < .003 < .003  
Heptachlor < .003 < .003

Heptachlor epoxide

Lindane < .003 < .003  
Methoxychlor < .003 < .003  
PCB 1016 < .013 < .013  
PCB 1221 < .013 < .013

PCB 1232

PCB 1242 < .013 < .013  
PCB 1248 < .013 < .013  
PCB 1254 < .013 < .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C9. E1 Site 5: Electrical Shop, Building 4  
PCB Screening Samples Analytical Results

Sample Name:	E1005PCB10	E1005PCB13
Depth (feet):	0	0
Sample Date:	11/18/93	11/18/93
-----		
Analytes		
-----		
Pesticides/PCBs		
PCB 1260	.59 C	< .013
Toxaphene	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003
alpha-Chlordane	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003
beta-Benzenehexachloride	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003
delta-Benzenehexachloride	< .003	.0143 C
gamma-Chlordane	.00601 C	< .003

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C10. EI Site 5. Electrical Shop, Building 4  
Surface Soil Samples Analytical Results

Sample Name:	E1005SS001	E1005SS002	E1005SS003	E1005SS004	E1005SS005
Depth (feet):	0	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/29/93	11/29/93	11/29/93
Analytes					
-----					
Landfill Parameters					
Diesel fuel	< 8	< 8	< 8	< 8	< 8
Gasoline	< 8	< 8	< 8	< 8	< 8

-----  
 Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table C11. EI Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	EI005S8001	EI005S8001	EI005S8001	EI005S8002
Depth (feet):	2	4	9.5	2.5
Sample Date:	01/03/94	01/03/94	01/03/94	01/03/94
Analytes				
-----				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	.0185 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	.01 C
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
Endosulfan sulfate				
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .003	< .003	< .003	< .003
Endrin ketone	< .022	< .022	< .022	< .022
Heptachlor	< .003	< .003	< .003	< .003
	< .003	< .003	< .003	< .003
Heptachlor epoxide				
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232				
PCB 1242	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C11. EI Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	E1005SB001	E1005SB001	E1005SB001	E1005SB002
Depth (feet):	2	4	9.5	2.5
Sample Date:	01/03/94	01/03/94	01/03/94	01/03/94
Analytes				
Pesticides/PCBs				
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003
Landfill Parameters				
Diesel Fuel	< 8 /L	< 8 /L	< 8 /L	< 8 /L
Gasoline	< 8 /L	< 8 /L	< 8 /L	< 8 /L

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C11. EI Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	EI005SB002	EI005SB002	EI005SB003	EI005SB003
Depth (feet):	4.5	9.5	2	4
Sample Date:	01/03/94	01/03/94	01/04/94	01/04/94
-----				
Analytes				
-----				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
-----				
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003
-----				
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013
-----				
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C11. EI Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	EI005SB002	EI005SB002	EI005SB003	EI005SB003
Depth (feet):	4.5	9.5	2	4
Sample Date:	01/03/94	01/03/94	01/04/94	01/04/94
Analytes				
-----				
Pesticides/PCBs				
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003
Landfill Parameters				
Diesel Fuel	< 8 /L	< 8 /L	20	520
Gasoline	< 8 /L	< 8 /L	< 8	< 8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C11. EI Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	E1005S8003	E1005S8004	E1005S8004	E1005S8004-DUP
Depth (feet):	7.5	2.5	4.5	5
Sample Date:	01/04/94	01/04/94	01/04/94	01/04/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003 D
Aldrin	< .003	< .003	< .003	< .003 D
Dieldrin	< .003	< .003	< .003	< .003 D
Endosulfan sulfate	< .003	< .003	< .003	< .003 D
Endrin	< .003	< .003	< .003	< .003 D
Endrin aldehyde	< .022	< .022	< .022	< .022 D
Endrin ketone	< .003	< .003	< .003	< .003 D
Heptachlor	< .003	< .003	< .003	< .003 D
Heptachlor epoxide	< .003	< .003	< .003	< .003 D
Lindane	< .003	< .003	< .003	< .003 D
Methoxychlor	< .003	< .003	< .003	< .003 D
PCB 1016	< .013	< .013	< .013	< .013 D
PCB 1221	< .013	< .013	< .013	< .013 D
PCB 1232	< .013	< .013	< .013	< .013 D
PCB 1242	< .013	< .013	< .013	< .013 D
PCB 1248	< .013	< .013	< .013	< .013 D
PCB 1254	< .013	< .013	< .013	< .013 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C11. E1 Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	E1005SB003	E1005SB004	E1005SB004	E1005SB004-DUP
Depth (feet):	7.5	2.5	4.5	5
Sample Date:	01/04/94	01/04/94	01/04/94	01/04/94
<b>Analytes</b>				
-----				
<b>Pesticides/PCBs</b>				
PCB 1260	< .013	< .013	< .013	< .013 D
Toxaphene	< .3	< .3	< .3	< .3 D
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003 D
alpha-Chlordane	< .003	< .003	< .003	< .003 D
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003 D
beta-Benzenehexachloride	< .003	< .003	< .003	< .003 D
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003 D
delta-Benzenehexachloride	< .003	< .003	< .003	< .003 D
gamma-Chlordane	< .003	< .003	< .003	< .003 D
<b>Landfill Parameters</b>				
Diesel Fuel	< 8	< 8	< 8	< 8 D
Gasoline	< 8	< 8	< 8	< 8 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C11. E1 Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	E1005SB005 2.5 01/04/94	E1005SB005 4 01/04/94	E1005SB005 7.5 01/04/94	E1005SB005-DUP 4.5 01/04/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003 D
Aldrin	< .003	< .003	< .003	< .003 D
Dieldrin	< .003	< .003	< .003	< .003 D
Endosulfan sulfate	< .003	< .003	< .003	< .003 D
Endrin	< .003	< .003	< .003	< .003 D
Endrin aldehyde	< .022	< .022	< .022	< .022 D
Endrin ketone	< .003	< .003	< .003	< .003 D
Heptachlor	< .003	< .003	< .003	< .003 D
Heptachlor epoxide	< .003	< .003	< .003	< .003 D
Lindane	< .003	< .003	< .003	< .003 D
Methoxychlor	< .003	< .003	< .003	< .003 D
PCB 1016	< .013	< .013	< .013	< .013 D
PCB 1221	< .013	< .013	< .013	< .013 D
PCB 1232	< .013	< .013	< .013	< .013 D
PCB 1242	< .013	< .013	< .013	< .013 D
PCB 1248	< .013	< .013	< .013	< .013 D
PCB 1254	< .013	< .013	< .013	< .013 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C11. EI Site 5: Electrical Shop, Building 4  
Subsurface Soil Samples Analytical Results

Sample Name:	E1005SB005	E1005SB005	E1005SB005	E1005SB005-DUP
Depth (feet):	2.5	4	7.5	4.5
Sample Date:	01/04/94	01/04/94	01/04/94	01/04/94
<hr/>				
Analytes				
<hr/>				
Pesticides/PCBs				
PCB 1260	< .013	< .013	< .013	< .013 D
Toxaphene	< .3	< .3	< .3	< .3 D
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003 D
alpha-Chlordane	< .003	< .003	< .003	< .003 D
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003 D
beta-Benzenehexachloride	< .003	< .003	< .003	< .003 D
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003 D
delta-Benzenehexachloride	< .003	< .003	< .003	< .003 D
gamma-Chlordane	< .003	< .003	< .003	< .003 D
<hr/>				
Landfill Parameters				
Diesel Fuel	< 8	< 8	< 8	< 8 D
Gasoline	< 8	< 8	< 8	< 8 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C12. E1 Site 6: Former Coal Storage Yard, Building 2  
Surface Soil Samples Analytical Results

Sample Name:	E1006SS001	E1006SS002	E1006SS003	E1006SS004	E1006SS004-DUP	E1006SS005
Depth (feet):	0	0	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/29/93	11/29/93	11/29/93	11/29/93
Analytes						
-----						
Metals						
Aluminum	6180	6930	6190	7640	NA	5360
Antimony	< .5 /J	< .5 /J	< .5 /J	< .5 /J	NA	< .5 /J
Arsenic	9.7	7.3	7.1	7.4	NA	7
Barium	80	72.9	72.6	106	NA	60.5
Beryllium	< .5	< .5	< .5	< .5	NA	< .5
Cadmium	1.33	< .5	< .5	1.72	NA	< .5
Calcium	52100	35200	29800	20900	NA	66400
Chromium	24.2	12	9.05	25.9	NA	11.6
Cobalt	6.3	6.93	5.83	7.64	NA	5.59
Copper	36.4	21.9	16.7	48	NA	18.6
Cyanide	< .25	< .25	< .25	< .25	NA	< .25
Iron	14500	15800	13100	16000	NA	14000
Lead	44.8	25.5	26.2	61.6	NA	57
Magnesium	21800	13400	14300	7020	NA	21000
Manganese	352	316	464	616	NA	349
Mercury	.737	.215	< .1	.421	NA	< .1
Nickel	18.2	18.2	13.1	19.7	NA	14
Potassium	582	680	595	690	NA	605
Selenium	.57	.595	.56	.85	NA	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C12. EI Site 6: Former Coal Storage Yard, Building 2  
Surface Soil Samples Analytical Results

Sample Name:	E1006SS001	E1006SS002	E1006SS003	E1006SS004	E1006SS004-DUP	E1006SS005
Depth (feet):	0	0	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/29/93	11/29/93	11/29/93	11/29/93
Analytes						
-----						
Metals						
Silver	< .5	< .5	< .5	.887	NA	< .5
Sodium	388	328	298	345	NA	419
Thallium	26.7	19.4	26.2	13.5	NA	26.8
Vanadium	15.8	19.4	17.9	20.9	NA	15.1
Zinc	110	87.5	50	123	NA	86.1
Landfill Parameters						
pH	8	7.9	7.8	8.1	8.1 D	7.9

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C12. E1 Site 6: Former Coal Storage Yard, Building 2  
Surface Soil Samples Analytical Results

Sample Name:	E1006SS005-DUP	E1006SS006	E1006SS007	E1006SS008	E1006SS009	E1006SS010
Depth (feet):	0	0	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/30/93	11/30/93	11/30/93	11/30/93
Analytes						
Metals						
Aluminum	3570 D	1790	8480	5800	7250	8450
Antimony	< 5 D/J	< 5 /J	< 5 /J	< 5 /J	< 5 /J	< 5 /J
Arsenic	6.9 D	1.57	9.6	5.26	5.62	6.14
Barium	48.3 D	< 39.8	117	63.4	87	93.7
Beryllium	< .5 D	< .5	.884	< .5	< .5	< .5
Cadmium	.587 D	< .5	< .5	< .5	< .5	< .5
Calcium	78300 D	110000	16700	21600	12100	7370
Chromium	17.3 D	3.92	13.1	8.23	10.1	11.7
Cobalt	3.91 D	2.91	10.8	4.45	5.98	5.99
Copper	18.4 D	7.74	22.7	13.1	25.4	23
Cyanide	< .25 D	< .25	< .25	< .25	< .25	< .25
Iron	10500 D	5830	20300	11900	11400	15400
Lead	311 D	< 5	25.1	32.4	39.9	35.3
Magnesium	24200 D	49300	6690	10900	4350	3070
Manganese	288 D	224	848	256	417	369
Mercury	< .1 D	< .1	< .1	< .1	< .1	< .1
Nickel	12.7 D	6.61	23.9	9.85	15.9	16.9
Potassium	426 D	852	573	580	1030	1010
Selenium	.483 D	< .25	< .5	< .5	1.09	.86

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C12. E1 Site 6: Former Coal Storage Yard, Building 2  
Surface Soil Samples Analytical Results

Sample Name:	E1006SS005-DUP	E1006SS006	E1006SS007	E1006SS008	E1006SS009	E1006SS010
Depth (feet):	0	0	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/30/93	11/30/93	11/30/93	11/30/93
Analytes						
-----						
Metals						
Silver	< .5 D	< .5	< .5	< .5	< .5	< .5
Sodium	311 D	381	526	364	435	430
Thallium	27.6 D	16.8	< 10	20.2	< 10	< 10
Vanadium	11.4 D	3.25	23.9	17.5	17.6	23
Zinc	93.2 D	15.7	83.6	59.4	83.3	82.9
Landfill Parameters						
pH	7.7 D	8.2	7.7	7.5	7.3	7.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C13. E1 Site 6: Former Coal Storage Yard, Building 2  
Subsurface Soil Samples Analytical Results

Sample Name:	E1006SB001	E1006SB002	E1006SB003	E1006SB004	E1006SB005	E1006SB006
Depth (feet):	2.5	1	2.5	2.5	2.5	2
Sample Date:	12/20/93	12/21/93	12/20/93	12/21/93	12/21/93	12/21/93
Analytes						
-----						
Metals						
Aluminum	10500	5080	12700	10100	2460	9200
Antimony	< 5	< 5	< 5	< 5	< 5	< 5
Arsenic	.94	6.8	35	9.1	2.1	9.4
Barium	53.9	< 39.8	81.9	62.6	< 39.8	67.2
Beryllium	1.15	< .5	.738	1.14	< .5	1.53
Cadmium	< .5	< .5	< .5	< .5	< .5	< .5
Calcium	21100	84700	28800	46700	110000	35400
Chromium	15.2	9.71	16.1	14.8	6.2	14.2
Cobalt	7.38	2.82	5.88	5.47	2.57	5.66
Copper	17.6	10.9	13.8	13.7	4.38	15.3
Cyanide	< .25	< .25	< .25	< .25	1.75	< .25
Iron	16400	9030	19600	14800	6200	15300
Lead	14.1	13.5	11.4	15.9	< 5	15.3
Magnesium	10400	28200	10400	22800	61000	11400
Manganese	258	260	358	251	214	342
Mercury	< .1	< .1	< .1	< .1	< .1	< .1
Nickel	18.7	9.26	19.6	15.9	5.45	15.3
Potassium	1110	643	1270	1060	1390	1060
Selenium	< .25	< .25	.392	.604	< .25	.354

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C13. E1 Site 6: Former Coal Storage Yard, Building 2  
Subsurface Soil Samples Analytical Results

Sample Name:	E1006SB001	E1006SB002	E1006SB003	E1006SB004	E1006SB005	E1006SB006
Depth (feet):	2.5	1	2.5	2.5	2.5	2
Sample Date:	12/20/93	12/21/93	12/20/93	12/21/93	12/21/93	12/21/93
Analytes						
-----						
Metals						
Silver	< .5	< .5	< .5	< .5	< .5	< .5
Sodium	773	429	369	433	396	436
Thallium	< 10	< 10	18.5	13.7	< 10	< 10
Vanadium	24.6	15.8	32.3	25.1	9.95	23.6
Zinc	58.5	31.6	55.4	51.3	< 5	49.5
Landfill Parameters						
pH	7.7	7.6	7.5	7.5	7	7.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C13. E1 Site 6: Former Coal Storage Yard, Building 2  
Subsurface Soil Samples Analytical Results

Sample Name:	E1006SB006-DUP	E1006SB007	E1006SB008	E1006SB009	E1006SB010
Depth (feet):	2.3	2.5	2	2.3	1
Sample Date:	12/21/93	12/21/93	12/21/93	12/21/93	12/21/93
Analytes					
-----					
Metals					
Aluminum	1880 D	6380	5750	2390	8550
Antimony	< 5 D	< 5	< 5	< 5	< 5
Arsenic	2.82 D/I	9.1	9.2	6.5 /I	4.6 /I
Barium	< 39.8 D	< 39.8	< 39.8	< 39.8	46.2
Beryllium	< .5 D	.592	.598	< .5	.636
Cadmium	< .5 D	< .5	< .5	< .5	< .5
Calcium	100000 D	94500	83900	89100	13900
Chromium	5.33 D	10	8.74	8.26	12.7
Cobalt	2.09 DJP	4.33	4.6	2.72	6.36
Copper	7.11 D	11.3	11.5	9.24	8.21
Cyanide	< .25 D	< .25	< .25	< .25	< .25
Iron	5860 D	11400	11500	6630	12700
Lead	< 5 D	14.8	13.8	< 5	12.7
Magnesium	35600 D	19400	43700	34800	4620
Manganese	157 D	239	448	315	220
Mercury	< .1 D	< .1	< .1	< .1	< .1
Nickel	5.86 D	11.2	10	7.5	8.55
Potassium	366 D	911	667	359	451
Selenium	< .25 D	.353	.54	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C13. E1 Site 6: Former Coal Storage Yard, Building 2  
Subsurface Soil Samples Analytical Results

Sample Name:	E1006SB006-DUP	E1006SB007	E1006SB008	E1006SB009	E1006SB010
Depth (feet):	2.3	2.5	2	2.3	1
Sample Date:	12/21/93	12/21/93	12/21/93	12/21/93	12/21/93
Analytes					
-----					
Metals					
Silver	< .5 D	< .5	< .5	< .5	< .5
Sodium	356 D	672	494	337	277
Thallium	< 10 D	< 10	11.5 JP	< 10	< 10
Vanadium	15.7 D	17.1	17.2	7.72	20.8
Zinc	12.6 D	44.4	41.4	22.8	31.2
Landfill Parameters					
pH	8 D	7.1	7.4	7.6	7.6

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C14: EI Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Surface Water Samples Analytical Results

Sample Name: SM018SW001 SM018SW002  
Depth (feet): 0 0  
Sample Date: 01/11/94 01/11/94

Analytes

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	1	C	3	Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	3	C	10	Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	1	C	3	Cj
Aldrin	10	Cj	.29	Cj
Dieldrin	8	C	6	Cj
Dimethoate	< .25	j	< .25	j
Endosulfan sulfate	< .005		< .005	j
Endrin	2	Crr	.1	Crr
Endrin aldehyde	< .022		< .022	j
Heptachlor	< .005		< .005	j
Heptachlor epoxide	< .005		< .005	j
Lindane	< .005		.4	Cj
Methoxychlor	< .009		< .009	j
PCB 1016	< .13		< .13	j
PCB 1221	< .13		< .13	j
PCB 1232	< .13		< .13	j
PCB 1242	< .13		< .13	j
PCB 1248	< .13		< .13	j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C14: E1 Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Surface Water Samples Analytical Results

Sample Name: SM018SW001 SM018SW002  
Depth (feet): 0 0  
Sample Date: 01/11/94 01/11/94

Analytes

Pesticides/PCBs

PCB 1254	< .13	< .13	J
PCB 1260	< .13	< .13	J
Toxaphene	< .6	< .6	J
alpha-Benzenhexachloride	< .005	< .005	J
alpha-Chlordane	4	2	CJ
alpha-Endosulfan/Endosulfan I	< .005	< .005	J
beta-Benzenhexachloride	< .005	< .005	J
beta-Endosulfan/Endosulfan II	< .005	< .005	J
delta-Benzenhexachloride	< .005	< .005	J
gamma-Chlordane	4	2	CJ

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	.1	P	4	C
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1		< .1	
245T	.19	C	10	CJ
245Tp	< .1		< .1	
Dalapon	< .1		< .1	
Dicamba	< .1		< .1	
Dichloroprop	< .1		< .1	
Dinoseb	< .1		< .1	

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C14: EI Site SM18: Pesticide Mixing and Storage Areas  
 DIS Maintenance Storage Shed, Building 27  
 Surface Water Samples Analytical Results

Sample Name: SM018SW001 SM018SW002  
 Depth (feet): 0 0  
 Sample Date: 01/11/94 01/11/94

Analytes

Herbicides

MCPA < 3 rr < 3 rr  
 MCPP < 3 rr < 3

Metals

Aluminum 2080 J 4160 J  
 Aluminum (Filtered) < 40 Fj < 40 Fj  
 Antimony 4.9 b 10.5  
 Antimony (Filtered) 3.7 Fbj 6.5 Fb  
 Arsenic 82.6 230

Arsenic (Filtered)

3.9 F 7.2 Fj

Barium

47.9 181

Barium (Filtered)

< 25 F < 25 F

Beryllium

< 5 < 5

Beryllium (Filtered)

< 5 F < 5 F

Cadmium

8.08 40.2

Cadmium (Filtered)

< 5 F < 5 F

Calcium

13300 42900

Calcium (Filtered)

8690 F 24600 F

Chromium

10.4 13

Chromium (Filtered)

< 10 F < 10 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C14: EI Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Surface Water Samples Analytical Results

Sample Name: SM018SW001 SM018SW002  
Depth (feet): 0 0  
Sample Date: 01/11/94 01/11/94

Analytes

Metals

Cobalt	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F
Copper	134	306
Copper (Filtered)	< 5 F	5.38 F
Cyanide	< 2.5	< 2.5
Iron	17800	30800
Iron (Filtered)	146 F	115 Fb
Lead	120	110
Lead (Filtered)	< 2 F	< 2 F
Magnesium	2950	8180
Magnesium (Filtered)	1680 F	5080 F
Manganese	165	298
Manganese (Filtered)	19.9 F	37.5 F
Mercury	< .2	< .2
Nickel	18.5 b	40.5
Nickel (Filtered)	< 15 F	< 15 F
Potassium	1200 bj/1	2500 j/1
Potassium (Filtered)	607 Fbj/1	2010 Fbj/1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C14: EI Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Surface Water Samples Analytical Results

Sample Name: SM018SW001 SM018SW002  
Depth (feet): 0 0  
Sample Date: 01/11/94 01/11/94

Analytes

Metals

Selenium	< 2.5	< 2.5
Selenium (Filtered)	< 2.5 F	< 2.5 F
Silver	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F
Sodium	9730 J/I	43900 J/I
Sodium (Filtered)	10400 Fj/I	41700 Fj/I
Thallium	< 2.5 J	< 2.5 J
Thallium (Filtered)	< 2.5 Fj	< 2.5 Fj
Vanadium	< 10	13.8
Vanadium (Filtered)	< 10 F	< 10 F
Zinc	2090	9240
Zinc (Filtered)	45.5 F	495 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C15: EI Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Sediment Samples Analytical Results

Sample Name:	SM018SE001	SM018SE002	SM018SE003
Depth (feet):	.5	.5	.5
Sample Date:	01/11/94	01/11/94	01/11/94
Analytes			
-----			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	4.8 Cj	9.1 C	6.1 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	7.2 Cj	23 C	9.2 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	2.4 Cj	6.8 C	3.1 C
Aldrin	48 Cj	.23 C	31 C
Dieldrin	48 Cj	23 C	92 C
Dimethoate	< .033 J	< .033 J	< .033 J
Endosulfan sulfate	< .003 J	< .003	< .003
Endrin	< .003 J	< .003	< .003
Endrin aldehyde	< .022 J	< .022	< .022
Endrin ketone	< .3 rr	< .119 JPr	< .003 rr
Heptachlor	< .003 J	< .003	.25 C
Heptachlor epoxide	< .003 J	< .003	< .003
Lindane	< .003 J	.0822 Cj	< .003
Methoxychlor	< .003 J	< .003	< .003
PCB 1016	< .013 J	< .013	< .013
PCB 1221	< .013 J	< .013	< .013
PCB 1232	< .013 J	< .013	< .013
PCB 1242	< .013 J	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C15: EI Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Sediment Samples Analytical Results

Sample Name:	SM018SE001	SM018SE002	SM018SE003
Depth (feet):	.5	.5	.5
Sample Date:	01/11/94	01/11/94	01/11/94
-----			
Analytes			
-----			
Pesticides/PCBs			
PCB 1248	< .013 j	< .013	< .013
PCB 1254	< .013 j	< .013	< .013
PCB 1260	< .013 j	< .013	< .013
Toxaphene	< .3 j	< .3	< .3
alpha-Benzenhexachloride	< .003 j	< .003	< .003
-----			
alpha-Chlordane	19 Cj	9.1 C	18 C
alpha-Endosulfan/Endosulfan I	< .003 j	< .003	< .003
beta-Benzenhexachloride	< .003 j	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003 j	< .003	< .003
delta-Benzenhexachloride	< .003 j	< .003	< .003
-----			
gamma-Chlordane	24 Cj	11 C	25 C
-----			
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	1.4 C	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01
245T	< .01	1.8 C	< .01
245TP	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01
-----			
Dicamba	< .01	< .01 rr	< .01
Dichloroprop	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C15: E1 Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Sediment Samples Analytical Results

Sample Name:	SM018SE001	SM018SE002	SM018SE003
Depth (feet):	.5	.5	.5
Sample Date:	01/11/94	01/11/94	01/11/94
-----			
Analytes			
-----			
Herbicides			
Dinoseb	< .01	< .01	< .01
MCPA	< .2	< .2	< .2
MCPP	< .2	46 C	< .2 rr
-----			
Metals			
Aluminum	6750	4110	12300
Antimony	13.5	< 5	< 5
Arsenic	96 j	910 j	150 j
Barium	113	196	196
Beryllium	< .5	< .5	3.07
-----			
Cadmium	21.4	36.5	19
Calcium	81900	13700	123000
Chromium	16.1	274	20.6
Cobalt	< 2	10.7	7.67
Copper	101	212	92
-----			
Cyanide	.805	1.42	1.07
Iron	22700	75300	28200
Lead	94	1230	76.7
Magnesium	15700	2740	16600
Manganese	289	187	583

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C15: EI Site SM18: Pesticide Mixing and Storage Areas  
DIS Maintenance Storage Shed, Building 27  
Sediment Samples Analytical Results

Sample Name:	SM018SE001	SM018SE002	SM018SE003
Depth (feet):	.5	.5	.5
Sample Date:	01/11/94	01/11/94	01/11/94
Analytes			
Metals			
Mercury	3.01	4.43	4.33
Nickel	23.4	34.2	33.7
Potassium	1040	890	951
Selenium	.867 rr	< .25 rr	.982 rr
Silver	< .5	< .5	< .5
Sodium	1110	1070	1130
Thallium	< 10	< 10	< 10
Vanadium	15.9	16.2	24.5
Zinc	5780	9360	3680

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM019SS001 0 01/10/94	SM019SS002 0 01/10/94	SM019SS003 0 01/09/94	SM019SS004 0 01/10/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.00387 C	< .003 j
Aldrin	< .003	< .003	< .003	< .003 j
Dieldrin	< .003	< .003	< .003	< .003 j
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003	< .003 j
Endrin	< .003	< .003	< .003	< .003 j
Endrin aldehyde	< .022	< .022	< .022	< .022 j
Endrin ketone	< .003 j	< .003 j	< .003 j	< .003 j
Heptachlor	< .003	< .003	< .003	< .003 j
Heptachlor epoxide	< .003	< .003	.00474 C	< .003 j
Lindane	< .003 j	< .003 j	< .003 j	< .003 j
Methoxychlor	< .003	< .003	< .003	< .003 j
PCB 1016	< .013	< .013	< .013	< .013 j
PCB 1221	< .013	< .013	< .013	< .013 j
PCB 1232	< .013	< .013	< .013	< .013 j
PCB 1242	< .013	< .013	< .013	< .013 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

## Surface Soil Samples Analytical Results

Sample Name:	SM019SS001	SM019SS002	SM019SS003	SM019SS004
Depth (feet):	0	0	0	0
Sample Date:	01/10/94	01/10/94	01/09/94	01/10/94
Analytes				
-----				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013 j
PCB 1254	< .013	< .013	< .013	< .013 j
PCB 1260	< .013	< .013	< .013	< .013 j
Toxaphene	< .3	< .3	< .3	< .3 j
alpha-Benzenhexachloride	< .003 j	< .003 j	< .003 j	< .003 j
alpha-Chlordane	.00641 C	.0103 C	.0237 C	< .003 j
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003 j
beta-Benzenhexachloride	< .003	< .003	< .003	< .003 j
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003 j
delta-Benzenhexachloride	< .003 j	< .003 j	< .003 j	< .003 j
gamma-Chlordane	.00427 C	.00601 C	.0137 C	< .003 j
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01 /N	< .01 /N	< .01 /N	< .01 /N
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 j	< .01 j	< .01 j	< .01 j
245T	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01
Datapon	< .01	< .01	< .01	< .01
Dicamba	< .01 j/N	< .01 j/N	< .01 j/N	< .01 j/N
Dichloroprop	< .01	< .01	< .01	.105 Cj

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

Surface Soil Samples Analytical Results

Sample Name:	SM019SS001	SM019SS002	SM019SS003	SM019SS004
Depth (feet):	0	0	0	0
Sample Date:	01/10/94	01/10/94	01/09/94	01/10/94
Analytes				
Herbicides				
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPB	< .2	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

Surface Soil Samples Analytical Results			
Sample Name: Depth (feet): Sample Date:	SM019SS005 0 01/10/94	SM019SS006 0 01/10/94	SM019SS006-DUP 0 01/10/94
SM019SS007 0 01/10/94			
Analytes			
-----			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	.0153 C	.00895 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	.0079 C	.00465 C
Aldrin	.0073 C	.00377 C	< .003 D
Dieldrin	.0191 C	.00731 C	< .003 D
-----			
Dimethoate	< .033 j	< .033 j	< .033 D j
Endosulfan sulfate	< .003	< .003	< .003 D
Endrin	< .003	< .003	< .003 D
Endrin aldehyde	< .022	< .022	< .022 D
Endrin ketone	< .003 j	< .003 j	< .003 D j
-----			
Heptachlor	< .003	< .003	< .003 D
Heptachlor epoxide	< .003	< .003	< .003 D
Lindane	< .003 j	.00696 C j	< .003 D j
Methoxychlor	< .003	< .003	< .003 D
PCB 1016	< .013	< .013	< .013 D
-----			
PCB 1221	< .013	< .013	< .013 D
PCB 1232	< .013	< .013	< .013 D
PCB 1242	< .013	< .013	< .013 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. E1 Site SM19: Pesticide Mixing and Storage Areas  
Building 514  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM019SS005 0 01/10/94	SM019SS006 0 01/10/94	SM019SS006-DUP 0 01/10/94	SM019SS007 0 01/10/94
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013 D	< .013
PCB 1254	< .013	< .013	< .013 D	< .013
PCB 1260	< .013	< .013	< .013 D	< .013
Toxaphene	< .3	< .3	< .3 D	< .3
alpha-Benzenhexachloride	< .003 j	< .003 j	< .003 Dj	< .003 j
alpha-Chlordane	< .003	.0271 C	.0298 C	.0762 C
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003 D	< .003
beta-Benzenhexachloride	< .003	< .003	< .003 D	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003 D	< .003
delta-Benzenhexachloride	< .003 j	< .003 j	< .003 Dj	< .003 j
gamma-Chlordane	< .003	.0271 C	.0358 C	.0786 C
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01 /N	< .01 /N	< .01 D/N	< .1 /N
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 j	< .01 j	< .01 Dj	< .1 j
245T	< .01	< .01 j	< .01 Dj	< .1 j
245TP	< .01	< .01	< .01 D	< .1 j
Dalapon	< .01	< .01	< .01 D	< .1
Dicamba	< .01 j/N	< .01 j/N	< .01 Dj/N	< .1 j/N
Dichloroprop	.0275 Cj	< .01	< .01 D	< .1

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

Surface Soil Samples Analytical Results

Sample Name:	SM019SS005	SM019SS006	SM019SS006-DUP	SM019SS007
Depth (feet):	0	0	0	0
Sample Date:	01/10/94	01/10/94	01/10/94	01/10/94
<hr/>				
Analytes				
<hr/>				
Herbicides				
Dinoseb	< .01	< .01	< .01	< .1
MCPA	< .2	< .2	< .2	< 2
MCPB	< .2	< .2	< .2	< 2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

## Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM019SS008 0 01/10/94	SM019SS009 0 01/10/94	SM019SS010 0 01/10/94	SM019SS011 0 01/10/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003 j	< .003 j	< .003 j	< .003 j
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003 j	< .003 j	< .003 j	< .003 j
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514

Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM019SS008 0 01/10/94	SM019SS009 0 01/10/94	SM019SS010 0 01/10/94	SM019SS011 0 01/10/94
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003 j	< .003 j	< .003 j	< .003 j
alpha-Chlordane	< .003	< .003	.00732 C	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003 j	< .003 j	< .003 j	< .003 j
gamma-Chlordane	< .003	< .003	.00431 C	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .2 /N	< .01 /N	< .01 /N	< .01 /N
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .5 jK	< .01 j	< .01 j	< .01 j
245T	< .2 j	< .01 j	< .01 j	< .01 j
245TP	< .2 j	< .01	< .01	< .01
Dalapon	< .2 rr	< .01	< .01	< .01
Dicamba	< .2 j/N	< .01 j/N	< .01 j/N	< .01 j/N
Dichloroprop	< .5 K	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. E1 Site SM19: Pesticide Mixing and Storage Areas  
Building 514  
Surface Soil Samples Analytical Results

Sample Name:	SM019SS008	SM019SS009	SM019SS010	SM019SS011
Depth (feet):	0	0	0	0
Sample Date:	01/10/94	01/10/94	01/10/94	01/10/94
Analytes				
Herbicides				
Dinoseb	< .5	< .01	< .01	< .01
MCPA	< 4	< .2	< .2	< .2
MCPB	< 4	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514  
Surface Soil Samples Analytical Results

Sample Name: SM019SS012  
Depth (feet): 0  
Sample Date: 01/10/94

Analytes	
-----	
Pesticides/PCBs	
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.0629 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.0552 C
Aldrin	.0167 Crr
Dieldrin	< .003
Dimethoate	< .033 J
Endosulfan sulfate	< .003
Endrin	< .003
Endrin aldehyde	< .022
Endrin ketone	< .003 J
Heptachlor	< .003
Heptachlor epoxide	< .003
Lindane	< .003 J
Methoxychlor	< .003
PCB 1016	< .013
PCB 1221	< .013
PCB 1232	< .013
PCB 1242	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514  
Surface Soil Samples Analytical Results

Sample Name: SM019SS012  
Depth (feet): 0  
Sample Date: 01/10/94

Analytes

Pesticides/PCBs

PCB 1248 < .013  
PCB 1254 < .013  
PCB 1260 < .013  
Toxaphene < .3  
alpha-Benzenhexachloride < .003 j

alpha-Chlordane < .003  
alpha-Endosulfan/Endosulfan I < .003  
beta-Benzenhexachloride < .003  
beta-Endosulfan/Endosulfan II < .003  
delta-Benzenhexachloride < .003 j

gamma-Chlordane < .003

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid < .01 /N  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01 j  
245T < .01 j  
245TP < .01  
Dalapon < .01

Dicamba < .01 j/N  
Dichloroprop < .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C16. EI Site SM19: Pesticide Mixing and Storage Areas  
Building 514  
Surface Soil Samples Analytical Results

Sample Name: SM019SS012  
Depth (feet): 0  
Sample Date: 01/10/94

Analytes

-----

Herbicides	
Dinoseb	< .01
MCPA	< .2
MCPP	< .2 rr

-----

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name:	SM20SS001	SM20SS002	SM20SS003	SM20SS004
Depth (feet):	0	0	0	0
Sample Date:	12/21/93	12/21/93	12/21/93	12/21/93
<hr/>				
Analytes				
<hr/>				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.4 Cj	.12 Cj	.79 Cj	.85 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	.017 Cj	< .003	.12 Crr
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.4 Crr	.12 Cj	.13 Cj	.49 Cj
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	.13 Cj	.97 Cj	.13 Cj	.12 Cj
<hr/>				
Dimethoate	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	.0158 Cj	.0224 Cj	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
<hr/>				
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	.0547 Cj	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
<hr/>				
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM020SS001 0 12/21/93	SM020SS002 0 12/21/93	SM020SS003 0 12/21/93	SM020SS004 0 12/21/93
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	1.3 Cj	.0523 Cj	.26 Cj	2.4 Cj
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	2.7 Cj	.00803 Cj	.0277 Cj	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	4 Cj	.00657 Crr	.0356 Cj	.0207 Crr
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	.53 C	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 /N	< .01 /N	< .01 /N	< .01 /N
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01	< .01	< .01
245T	< .01 /JN	< .01 /JN	< .01 /JN	< .01 /JN
245TP	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	.0333 C	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name:	SM020SS001	SM020SS002	SM020SS003	SM020SS004
Depth (feet):	0	0	0	0
Sample Date:	12/21/93	12/21/93	12/21/93	12/21/93
Analytes				
Herbicides				
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM020SS005 0 12/21/93	SM020SS005-DUP 0 12/21/93	SM020SS006 0 12/21/93	SM020SS007 0 12/21/93
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.99 Cj	.48 DCj	.0907 Cj	.11 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	.25 Cj	.0155 DCj	.0283 Cj	.0259 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.87 Cj	.48 DC	.0907 Cj	.0614 Cj
Aldrin	< .003	< .003 D	< .003	< .003
Dieldrin	.0718 Cj	.0297 DC	.0227 Cj	.0119 Cj
Dimethoate	< .033	< .033 D	< .033	< .033
Endosulfan sulfate	< .003	< .003 D	< .003	< .003
Endrin	< .003	< .003 D	< .003	.00765 Crr
Endrin aldehyde	< .022	< .022 D	< .022	< .022
Endrin ketone	< .003	< .003 D	< .003	< .003
Heptachlor	< .003	< .003 D	< .003	< .003
Heptachlor epoxide	< .003	< .003 D	< .003	< .003
Lindane	< .003	< .003 D	< .003	< .003
Methoxychlor	< .003	< .003 D	< .003	< .003
PCB 1016	< .013	< .013 D	< .013	< .013
PCB 1221	< .013	< .013 D	< .013	< .013
PCB 1232	< .013	< .013 D	< .013	< .013
PCB 1242	< .013	< .013 D	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: SM020SS005 SM020SS005-DUP SM020SS006 SM020SS007  
Depth (feet): 0 0 0 0  
Sample Date: 12/21/93 12/21/93 12/21/93 12/21/93

Analytes

Pesticides/PCBs

PCB 1248	< .013	< .013 D	< .013	< .013
PCB 1254	< .013	< .013 D	< .013	< .013
PCB 1260	2.5 Cj	.95 DCj	.122 Cj	.43 Cj
Toxaphene	< .3	< .3 D	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003 D	< .003	< .003
alpha-Chlordane	.00483 Cj	< .003 D	< .003	.0119 Cj
alpha-Endosulfan/Endosulfan I	< .003	< .003 D	< .003	< .003
beta-Benzenhexachloride	< .003	< .003 D	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003 D	< .003	< .003
delta-Benzenhexachloride	< .003	< .003 D	< .003	< .003
gamma-Chlordane	.0186 Crr	< .003 D	< .003	.0194 Cj

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	.0173 C	.0202 C	< .01	.014 C
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 /N	< .01 D/N	< .01 /N	< .01 /N
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01 D	< .01	< .01
245T	< .01 /JN	< .01 D/JN	< .01 /JN	< .01 /JN
245TP	< .01	< .01 D	< .01	< .01
Dalapon	< .01	< .01 D	< .01	< .01
Dicamba	< .01	< .01 D	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name:	SM020SS005	SM020SS005-DUP	SM020SS006	SM020SS007
Depth (feet):	0	0	0	0
Sample Date:	12/21/93	12/21/93	12/21/93	12/21/93
Analytes				
Herbicides				
Dinoseb	< .01	< .01 D	< .01	< .01
MCPA	< .2	< .2 D	< .2	< .2
MCPP	< .2	< .2 D	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM020SS008 0 12/21/93	SM020SS009 0 12/21/93	SM020SS010 0 12/21/93	SM020SS011 0 12/21/93
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.24 Cj	.71 Cj	6.8 Cj	.0739 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	.0684 Cj	.0697 Crr	< .003	.0327 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.36 Cj	.47 C	5.7 Cj	.12 C
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	.0096 Cj	< .003	.0148 Cj	.004 C
Dimethoate	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	.00605 Crr	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM020SS008 0 12/21/93	SM020SS009 0 12/21/93	SM020SS010 0 12/21/93	SM020SS011 0 12/21/93
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	.0984 CJ	.0461 CJ	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	.00396 Crr	< .003	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 /N	< .01 /N	< .01 /N	< .01 /N
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01	< .01	< .01
245T	< .01 /JN	< .01 /JN	< .01 /JN	< .01 /JN
245TP	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name:	SM020SS008	SM020SS009	SM020SS010	SM020SS011
Depth (feet):	0	0	0	0
Sample Date:	12/21/93	12/21/93	12/21/93	12/21/93
Analytes				
Herbicides				
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: SM020SS012  
Depth (feet): 0  
Sample Date: 12/21/93

Analytes	
-----	
Pesticides/PCBs	
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.5 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	.0644 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.12 Cj
Aldrin	< .003
Dieldrin	.0297 Cj
Dimethoate	< .033
Endosulfan sulfate	< .003
Endrin	< .003
Endrin aldehyde	< .022
Endrin ketone	< .003
Heptachlor	< .003
Heptachlor epoxide	< .003
Lindane	< .003
Methoxychlor	< .003
PCB 1016	< .013
PCB 1221	< .013
PCB 1232	< .013
PCB 1242	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C17: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: SM020SS012  
Depth (feet): 0  
Sample Date: 12/21/93

Analytes	
-----	
Pesticides/PCBs	
PCB 1248	< .013
PCB 1254	< .013
PCB 1260	< .013
Toxaphene	< .3
alpha-Benzenehexachloride	< .003
alpha-Chlordane	< .003
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenehexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenehexachloride	< .003
gamma-Chlordane	< .003
Herbicides	
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 /N
2-(2,4-Dichlorophenoxy)propionic acid	< .01
245T	< .01 /JN
245TP	< .01
Dalapon	< .01
Dicamba	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C17: E1 site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Soil Samples Analytical Results

Sample Name: SM020SS012  
Depth (feet): 0  
Sample Date: 12/21/93

Analytes

Herbicides

Dinoseb

MCPA

MCPP

< .01  
< .2  
< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C18: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Subsurface Soil Samples Analytical Results

Sample Name:	SM020SB001	SM020SB002	SM020SB002-DUP	SM020SB003
Depth (feet):	3.5	3	3	3
Sample Date:	11/30/93	12/01/93	12/01/93	12/01/93
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	.00383 C	.0272 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003 D	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003 D	.00795 C
Aldrin	< .003	< .003	< .003 D	< .003
Dieldrin	< .003	< .003	< .003 D	.00511 C
Dimethoate	< .033	< .033 j	< .033 D j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003 D	< .003
Endrin	< .003	< .003	< .003 D	< .003
Endrin aldehyde	< .022	< .022	< .022 D	< .022
Endrin ketone	< .003	< .003	< .003 D	< .003
Heptachlor	< .003	< .003	< .003 D	< .003
Heptachlor epoxide	< .003	< .003	< .003 D	< .003
Lindane	< .003	< .003	< .003 D	< .003
Methoxychlor	< .003	< .003	< .003 D	< .003
PCB 1016	< .013	< .013	< .013 D	< .013
PCB 1221	< .013	< .013	< .013 D	< .013
PCB 1232	< .013	< .013	< .013 D	< .013
PCB 1242	< .013	< .013	< .013 D	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C18: EI Site SM20: Pesticide Mixing and Storage Areas  
 DIS Entomology, Building 605  
 Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM020SB001 3.5 11/30/93	SM020SB002 3 12/01/93	SM020SB002-DUP 3 12/01/93	SM020SB003 3 12/01/93
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013 D	< .013
PCB 1254	< .013	< .013	< .013 D	< .013
PCB 1260	< .013	< .013	< .013 D	.0193 C
Toxaphene	< .3	< .3	< .3 D	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003 D	< .003
alpha-Chlordane	< .003	< .003	< .003 D	.0216 C
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003 D	< .003
beta-Benzenehexachloride	< .003	< .003	< .003 D	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003 D	< .003
delta-Benzenehexachloride	< .003	< .003	< .003 D	< .003
gamma-Chlordane	< .003	< .003	< .003 D	.0238 C
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01 J	< .01 D J	< .01 J
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01 D	< .01 rr
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA
245T	< .01 J	< .01	< .01 D	< .01
245TP	< .01	< .01	< .01 D	< .01
Dalapon	< .01	< .01	< .01 D	< .01
Dicamba	< .01	< .01	< .01 D	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C18: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Subsurface Soil Samples Analytical Results

Sample Name:	SM020SB001	SM020SB002	SM020SB002-DUP	SM020SB003
Depth (feet):	3.5	3	3	3
Sample Date:	11/30/93	12/01/93	12/01/93	12/01/93
Analytes				
Herbicides				
Dichloroprop	< .01	< .01	< .01 D	< .01
Dinoseb	< .01	< .01	< .01 D	< .01
MCPA	< .2	< .2	< .2 D	< .2
MCPP	< .2 j	< .2	< .2 D	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C18: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Subsurface Soil Samples Analytical Results

Sample Name: SM020SB004  
Depth (feet): 3.5  
Sample Date: 12/20/93

Analytes

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene < .003  
Aldrin < .003  
Dieldrin < .003

Dimethoate < .033  
Endosulfan sulfate < .003  
Endrin < .003  
Endrin aldehyde < .022  
Endrin ketone < .003

Heptachlor < .003  
Heptachlor epoxide < .003  
Lindane < .003  
Methoxychlor < .003  
PCB 1016 < .013

PCB 1221 < .013  
PCB 1232 < .013  
PCB 1242 < .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C18: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Subsurface Soil Samples Analytical Results

Sample Name: SM020SB004  
Depth (feet): 3.5  
Sample Date: 12/20/93

Analytes

Pesticides/PCBs

PCB 1248 < .013  
PCB 1254 < .013  
PCB 1260 < .013  
Toxaphene < .3  
alpha-Benzenhexachloride < .003

alpha-Chlordane

alpha-Endosulfan/Endosulfan I < .003  
beta-Benzenhexachloride < .003  
beta-Endosulfan/Endosulfan II < .003  
delta-Benzenhexachloride < .003

gamma-Chlordane

< .003

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid < .01  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01 /N  
2-(2,4-Dichlorophenoxy)propionic acid < .01  
245T < .01 /JN  
245TP < .01

Dalapon

< .01

Dicamba

< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C18: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Subsurface Soil Samples Analytical Results

Sample Name: SM020SB004  
Depth (feet): 3.5  
Sample Date: 12/20/93

Analytes

Herbicides

Dichloroprop  
Dinoseb  
MCPA  
MCP

NA  
< .01  
< .2  
< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C19: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Water Samples Analytical Results

Sample Name:	SM020SW001	SM020SW001-DUP	SM020SW002
Depth (feet):	0	0	0
Sample Date:	02/15/94	02/15/94	02/15/94
Analytes			
-----			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007 D	< .007
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005	< .005 D	< .005
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007	< .007 D	< .007
Aldrin	< .005 j	< .005 D j	< .005 j
Dieldrin	< .005	< .005 D	< .005
Dimethoate	< .25 j	< .25 D j	< .25 j
Endosulfan sulfate	< .005	< .005 D	< .005
Endrin	< .005	< .005 D	< .005
Endrin aldehyde	< .022	< .022 D	< .022
Endrin ketone	< .006 j	< .006 D j	< .006 j
Heptachlor	< .005	< .005 D	< .005
Heptachlor epoxide	< .005	< .005 D	< .005
Lindane	< .005	< .005 D	< .005
Methoxychlor	< .009 j	< .009 D j	< .009 j
PCB 1016	< .13	< .13 D	< .13
PCB 1221	< .13	< .13 D	< .13
PCB 1232	< .13	< .13 D	< .13
PCB 1242	< .13	< .13 D	< .13

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C19: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Water Samples Analytical Results

Sample Name:	SM020SW001	SM020SW001-DUP	SM020SW002
Depth (feet):	0	0	0
Sample Date:	02/15/94	02/15/94	02/15/94

Analytes

Pesticides/PCBs

PCB 1248	< .13	< .13 D	< .13
PCB 1254	< .13	< .13 D	< .13
PCB 1260	< .13	< .13 D	< .13
Toxaphene	< .6	< .6 D	< .6
alpha-Benzenhexachloride	< .005	< .005 D	< .005

alpha-Chlordane

alpha-Endosulfan/Endosulfan I	< .005	< .005 D	< .005
beta-Benzenhexachloride	< .005	< .005 D	< .005
beta-Endosulfan/Endosulfan II	< .005	< .005 D	< .005
delta-Benzenhexachloride	< .005	< .005 D	< .005

gamma-Chlordane

gamma-Chlordane	< .005	< .005 D	< .005
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Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	.43	C	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1 D	< .1
245T	< .1	< .1 D	< .1
245TP	< .1	< .1 D	< .1
Dalapon	< .1	< .1 D	< .1

Dicamba

Dicamba	< .1	< .1 D	< .1
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Dichloroprop

Dichloroprop	< .1	< .1 D	< .1
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Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C19: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Surface Water Samples Analytical Results

Sample Name:	SM020SW001	SM020SW001-DUP	SM020SW002
Depth (feet):	0	0	0
Sample Date:	02/15/94	02/15/94	02/15/94

Analytes

Herbicides

Dinoseb	< .1	< .1	D	< .1
MCPA	< 3	< 3	D	< 3
MCPB	< 3	< 3	D	< 3

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C20: EI Site SM20: Pesticide Mixing and Storage Areas  
 DIS Entomology, Building 605  
 Sediment Samples Analytical Results

Sample Name: SM020SE001 SM020SE002  
 Depth (feet): 0 .2  
 Sample Date: 02/15/94 02/15/94

Analytes

Pesticides/PDBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .013 j  
 2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .003 j  
 2,2-Bis (p-chlorophenyl)-1,1-dichloroethene < .003 j  
 Aldrin < .003 j  
 Dieldrin .0093 C .00775 Crr

Dimethoate

Endosulfan sulfate < .033 j  
 Endrin < .3 j  
 Endrin aldehyde < .022 j  
 Endrin ketone < .022 j  
 < 10 j

Heptachlor

Heptachlor epoxide < .003 j  
 Lindane < .003 j  
 Methoxychlor < .003 j  
 PCB 1016 < .013 j  
 < .013 j

PCB 1221

PCB 1232 < .2 j  
 PCB 1242 < .013 j  
 < .013 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C20: EI Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Sediment Samples Analytical Results

Sample Name: SM020SE001 SM020SE002  
Depth (feet): 0 .2  
Sample Date: 02/15/94 02/15/94

Analytes

Pesticides/PCBs

PCB 1248 < .013 j < .013 j  
PCB 1254 < .013 j < .013 j  
PCB 1260 < .013 j < .013 j  
Toxaphene < .3 j < .3 j  
alpha-Benzenehexachloride < .003 j < .003 j

alpha-Chlordane < 2 j < 2 j  
alpha-Endosulfan/Endosulfan I < .003 j < .003 j  
beta-Benzenehexachloride < .003 j < .003 j  
beta-Endosulfan/Endosulfan II < .003 j < .003 j  
delta-Benzenehexachloride < .003 j < .003 j

gamma-Chlordane .00388 CJPb < .003 j

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid < .01 < .01  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01 < .01  
245T < .01 < .01  
245TP < .01 < .01  
Dalapon < .01 < .01

Dicamba < .01 < .01  
Dichloroprop < .01 < .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C20: E1 Site SM20: Pesticide Mixing and Storage Areas  
DIS Entomology, Building 605  
Sediment Samples Analytical Results

Sample Name: SM020SE001 SM020SE002  
Depth (feet): 0 .2  
Sample Date: 02/15/94 02/15/94

Analytes

Herbicides

Dinoseb < .01 < .01  
MCPA < .2 < .2  
MCPB < .2 < .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name:	SM021SS001	SM021SS002	SM021SS003	SM021SS003-DUP
Depth (feet):	0	0	0	0
Sample Date:	01/05/94	01/06/94	01/05/94	01/05/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	.0305 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.0345 Crr	< .003 D
Aldrin	< .003	< .003	< .003	< .003 D
Dieldrin	< .003	< .003 rr	< .003	.0159 C
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 D j
Endosulfan sulfate	< .003	< .003	< .003	< .003 D
Endrin	< .003	< .003	< .003	< .003 D
Endrin aldehyde	< .022	< .022	< .022	< .022 D
Endrin ketone	< .003	< .003 j	< .003 j	< .003 D
Heptachlor	.0195 C	.11 Crr	< .003	< .003 D
Heptachlor epoxide	.12 C	< .06 rr	.0226 C	.0239 C
Lindane	< .003	< .003	< .003	< .003 D
Methoxychlor	< .003	< .003	< .003	< .003 D
PCB 1016	< .013	< .013	< .013	< .013 D
PCB 1221	< .013	< .013	< .013	< .013 D
PCB 1232	< .013	< .013	< .013	< .013 D
PCB 1242	< .013	< .013	< .013	< .013 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM021SS001 0 01/05/94	SM021SS002 0 01/06/94	SM021SS003 0 01/05/94	SM021SS003-DUP 0 01/05/94
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013 D
PCB 1254	< .013	< .013	< .013	< .013 D
PCB 1260	< .013	< .013	< .013	< .013 D
Toxaphene	< .3	< .3	< .3	< .3 D
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003 D
alpha-Chlordane	1.5 C	2.2 C	.27 C	.53 C
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003 D
beta-Benzenehexachloride	< .003	< .003	< .003	< .003 D
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003 D
delta-Benzenehexachloride	< .003	< .003	< .003	< .003 D
gamma-Chlordane	1.2 C	2.8 C	.27 C	.53 C
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	.0305 C	< .01 D
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01 D
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	< .01 D
245T	< .01	< .01	< .01	< .01 D
245TP	< .01	< .01	< .01	< .01 D
Dalapon	< .01	< .01	< .01	< .01 D
Dicamba	< .01	< .01	< .01	< .01 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name:	SM021SS001	SM021SS002	SM021SS003	SM021SS003-DUP
Depth (feet):	0	0	0	0
Sample Date:	01/05/94	01/06/94	01/05/94	01/05/94
Analytes				
Herbicides				
Dichloroprop	< .01	< .01	< .01	NA
Dinoseb	< .01	< .01	< .01	< .01 D
MCPA	< .2	< .2	< .2	< .2 D
MCPP	< .2	< .2	< .2 rr	< .2 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM021SS004 0 01/06/94	SM021SS005 0 01/05/94	SM021SS006 0 01/05/94	SM021SS007 0 01/05/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	.00606 C
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.00465 C	.0136 C
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003 j	< .003 j	< .003 j	< .003 j
Heptachlor	.0119 C	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	.0107 C
Lindane	< .003	< .003	< .003 rr	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name:	SM021SS004	SM021SS005	SM021SS006	SM021SS007
Depth (feet):	0	0	0	0
Sample Date:	01/06/94	01/05/94	01/05/94	01/05/94
<hr/>				
Analytes				
<hr/>				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	.43 C	.0466 C	.07 C	.19 C
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	.65 C	.0419 C	.093 C	.19 C
<hr/>				
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	.0261 C	< .01	.036 C	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	NA	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01
Dalepon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C21. E1 Site SM21: Pesticide Mixing and Storage Areas  
 Golf Course Pesticide Mixing Area, Building 674  
 Surface Soil Samples Analytical Results

Sample Name:	SM021SS004	SM021SS005	SM021SS006	SM021SS007
Depth (feet):	0	0	0	0
Sample Date:	01/06/94	01/05/94	01/05/94	01/05/94

Analytes

Herbicides

Dichloroprop	< .01	NA	NA	NA
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM021SS008 0 01/05/94	SM021SS009 0 01/05/94	SM021SS010 0 01/05/94	SM021SS011 0 01/05/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	.00546 Crr	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	.00502 C	.00546 C	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003 j
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003 j	< .003 j	< .003 j	< .003 j
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	.00646 C	.0116 C	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name:	SM021SS008	SM021SS009	SM021SS010	SM021SS011
Depth (feet):	0	0	0	0
Sample Date:	01/05/94	01/05/94	01/05/94	01/05/94
Analytes				
Pesticides/PCBs				
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	.096 C	.082 C	< .003	.0764 C
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	.072 C	.037 C	< .003	.0653 C
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name:	SM021SS008	SM021SS009	SM021SS010	SM021SS011
Depth (feet):	0	0	0	0
Sample Date:	01/05/94	01/05/94	01/05/94	01/05/94

Analytes

Herbicides

Dichloroprop	NA	NA	NA	NA
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCP	< .2	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name: SM021SS012  
Depth (feet): 0  
Sample Date: 01/05/94

Analytes	
-----	
Pesticides/PCBs	
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003
Aldrin	< .003
Dieldrin	.00635 Crr
Dimethoate	< .033 j
Endosulfan sulfate	< .003
Endrin	< .003
Endrin aldehyde	< .022
Endrin ketone	< .003
Heptachlor	< .003
Heptachlor epoxide	< .003
Lindane	< .003
Methoxychlor	< .003
PCB 1016	< .013
PCB 1221	< .013
PCB 1232	< .013
PCB 1242	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. E1 Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name: SM021SS012  
Depth (feet): 0  
Sample Date: 01/05/94

Analytes

Pesticides/PCBs

PCB 1248 < .013  
PCB 1254 < .013  
PCB 1260 < .013  
Toxaphene < .3  
alpha-Benzenhexachloride < .003

alpha-Chlordane .0487 C  
alpha-Endosulfan/Endosulfan I < .003  
beta-Benzenhexachloride < .003  
beta-Endosulfan/Endosulfan II < .003  
delta-Benzenhexachloride < .003

gamma-Chlordane .0458 C

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid < .01  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01  
2-(2,4-Dichlorophenoxy)propionic acid < .01  
245T < .01  
245TP < .01

Dalapon < .01  
Dicamba < .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C21. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Surface Soil Samples Analytical Results

Sample Name: SM021SS012  
Depth (feet): 0  
Sample Date: 01/05/94

Analytes

Herbicides

Dichloroprop  
Dinoseb  
MCPA  
MCPB

NA  
< .01  
< .2  
< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C22. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Sediment Samples Analytical Results

Sample Name: SM021SE001 SM021SE002  
Depth (feet): 0 0  
Sample Date: 01/05/94 01/05/94

Analytes		
-----		
Pesticides/PCBs		
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.00603 C	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.0065 C	< .003
Aldrin	< .003	< .003
Dieldrin	< .003	< .003
Dimethoate	< .033 J	< .033 J
Endosulfan sulfate	< .003	< .003
Endrin	< .003	< .003
Endrin aldehyde	< .022	< .022
Endrin ketone	< .003	< .003
Heptachlor	< .003	< .003
Heptachlor epoxide	< .003	.0178 C
Lindane	< .003	< .003
Methoxychlor	< .003	< .003
PCB 1016	< .013	< .013
PCB 1221	< .013	< .013
PCB 1232	< .013	< .013
PCB 1242	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C22. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Sediment Samples Analytical Results

Sample Name:	SM021SE001	SM021SE002
Depth (feet):	0	0
Sample Date:	01/05/94	01/05/94

Analytes

Pesticides/PCBs

PCB 1248	< .013	< .013
PCB 1254	< .013	< .013
PCB 1260	< .013	< .013
Toxaphene	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003

alpha-Chlordane

alpha-Endosulfan/Endosulfan I	< .003	.55 C
beta-Benzenhexachloride	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003
delta-Benzenhexachloride	< .003	< .003

gamma-Chlordane

gamma-Chlordane	< .003	.55 C
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Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01
245T	< .01	< .01
245TP	< .01	< .01

Dalapon

Dalapon	< .01	< .01
Dicamba	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C22. EI Site SM21: Pesticide Mixing and Storage Areas  
Golf Course Pesticide Mixing Area, Building 674  
Sediment Samples Analytical Results

Sample Name:	SM021SE001	SM021SE002
Depth (feet):	0	0
Sample Date:	01/05/94	01/05/94

Analytes

Herbicides

Dinoseb	< .01	< .01
MCPA	< .2	< .2
MCPP	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C23. E1 Site SM22. Firing Range, Foreman Rifle Range  
Near Buildings 811 and 812  
Surface Soil Samples Analytical Results

Sample Name:	SM022SS001	SM022SS002	SM022SS003	SM022SS004	SM022SS005	SM022SS006	SM022SS007
Depth (feet):	0	0	0	0	0	0	0
Sample Date:	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94
Analytes							
Metals							
Aluminum	7130	7170	5670	7520	6850	12200	4760
Antimony	100	583	11.8	255	< 5	11.7	45.3
Arsenic	13 j	24 j	9.4 j	7.6 j	4.6 j	1.8 j	8.83 j
Barium	53.8	53.5	54.3	59.9	58.1	83.2	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5	.757	< .5
Cadmium	< .5	< .5	< .5	< .5	< .5	< .5	< .5
Calcium	38800	42500	33100	39500	38300	10500	63900
Chromium	10.4 j	10.7 j	14.2 j	11.6 j	11 j	16.4 j	8.25 j
Cobalt	4.76	5.83	4.72	5.35	4.99	7.19	4.88
Copper	95.1 j	535 j	118 j	98.1 j	34.8 j	29 j	128 j
Cyanide	< .25	< .25	< .25	< .25	< .25	< .25	< .25
Iron	11600	17000	11000	14000	11600	16400	11100
Lead	9890	36000	1060	25000	74.3	1260	5340
Magnesium	16300	14600	11100	12700	13900	4790	17400
Manganese	325	450	401	433	476	303	314
Mercury	< .1	< .1	< .1	< .1	< .1	< .1	< .1
Nickel	12.5	14.6	11.2	14	12.8	13.9	13.9
Potassium	751 j	1140 j	980 j	1170 j	848 j	807 j	825 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C23. E1 Site SM22. Firing Range, Foreman Rifle Range  
Near Buildings 811 and 812  
Surface Soil Samples Analytical Results

Sample Name:	SM022SS001	SM022SS002	SM022SS003	SM022SS004	SM022SS005	SM022SS006	SM022SS007
Depth (feet):	0	0	0	0	0	0	0
Sample Date:	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94
Analytes							
-----							
Metals							
Selenium	< .25 j	< .25 j	< .25 j	< .25 j	< .25 j	< .25 j	< .25 rr
Silver	< .5	1.34	< .5	.637 P	.767	< .5	< .5
Sodium	350	340	331	344	337	303	325
Thallium	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Vanadium	18.8	19.4	17.7	20.4	19.7	29	12.8
Zinc	56.3	134	85	84.1	70.8	44.1	68.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C23. E1 Site SM22. Firing Range, Foreman Rifle Range  
Near Buildings 811 and 812  
Surface Soil Samples Analytical Results

Sample Name:	SM022SS008	SM022SS009	SM022SS010	SM022SS011
Depth (feet):	0	0	0	0
Sample Date:	01/06/94	01/06/94	01/06/94	01/06/94
Analytes				
-----				
Metals				
Aluminum	4070	5500	6220	4950
Antimony	543	56.2	203	56.5
Arsenic	31 j	24 j	32 j	11.2 j
Barium	< 39.8	< 39.8	50.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5
Calcium	39500	53800	53300	54200
Chromium	7.53 j	9.08 j	10.8 j	9.66 j
Cobalt	4.57	4.78	5.33	4.36
Copper	3090 j	872 j	1270 j	115 j
Cyanide	< .25	.381	< .25	< .25
Iron	11000	11900	15200	10100
Lead	49000	6210	25000	4360
Magnesium	14800	16700	17800	16500
Manganese	383	346	495	318
Mercury	< .1	< .1	< .1	< .1
Nickel	16	14.3	15.2	11.8
Potassium	741 j	1100 j	1100 j	824 j

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C23. EI Site SM22. Firing Range, Foreman Rifle Range  
Near Buildings 811 and 812  
Surface Soil Samples Analytical Results

Sample Name:	SM022SS008	SM022SS009	SM022SS010	SM022SS011
Depth (feet):	0	0	0	0
Sample Date:	01/06/94	01/06/94	01/06/94	01/06/94
Analytes				
-----				
Metals				
Selenium	< .25 rr	< .25 rr	< .25 rr	< .25 rr
Silver	1.85	< .5	.647	< .5
Sodium	296	358	381	342
Thallium	13.6	< 10	< 10	< 10
Vanadium	14.8	15.5	17.8	15.3
Zinc	395	143	279	71.8

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C24. EI Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Subsurface Soil Samples Analytical Results

Sample Name:	SM022SB001	SM022SB002	SM022SB002-DUP	SM022SB003	SM022SB004	SM022SB005
Depth (feet):	2.5	2.5	2.8	2.5	2.5	2.4
Sample Date:	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94
Analytes						
-----						
Metals						
Aluminum	7850	9260	7540 D	6670	6280	4580
Antimony	< 5	< 5	< 5 D	< 5	< 5	31.4
Arsenic	5.74 j	6.02 j	7.43 Dj	4.83 j	5.35 j	6.41 j
Barium	61	68.3	73.1 D	54	48.8	< 39.8
Beryllium	< .5	< .5	< .5 D	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5 D	< .5	< .5	< .5
Calcium	32800	12700	8110 D	27600	41900	77100
Chromium	11.5 j	13.9 j	10.6 Dj	9.66 j	9.53 j	9.02 j
Cobalt	5.39	6.02	5.14 D	5.06	4.65	4.18
Copper	32.8 j	60.2 j	16 Dj	19.5 j	16.3 j	64.1 j
Cyanide	< .25	< .25	< .25 D	< .25	< .25	< .25
Iron	12900	13900	13700 D	12600	11400	9930
Lead	516	486	24 D	31	46.5	3920
Magnesium	15200	5090	3310 D	10600	9530	36600
Manganese	481	405	754 D	483	384	392
Mercury	< .1	< .1	< .1 D	.126	< .1	< .1
Nickel	12.9	17.4	13.7 D	12.6	11.6	11.1
Potassium	938 j	880 j	514 Dj	793 j	721 j	719 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table c24. EI Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Subsurface Soil Samples Analytical Results

Sample Name:	SM022S8001	SM022S8002	SM022S8002-DUP	SM022S8003	SM022S8004	SM022S8005
Depth (feet):	2.5	2.5	2.8	2.5	2.5	2.4
Sample Date:	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94	01/06/94
Analytes						
-----						
Metals						
Selenium	< .25 rr	< .25 rr	< .25 Drr	< .25 rr	< .25 rr	< .25 rr
Silver	< .5	< .5	< .5 D	.747	< .5	< .5
Sodium	328	313	251 D	276	291	392
Thallium	< 10	< 10	< 10 D	< 10	< 10	14.4
Vanadium	22.3	24.3	17.1 D	20.7	17.4	14.4
Zinc	62.1	54.4	46.9 D	69	55.8	69.3

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C25. E1 Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Surface Water Samples Analytical Results

Sample Name:	SM022SW001	SM022SW002
Depth (feet):	0	0
Sample Date:	02/16/94	02/16/94

Analytes

Metals

Aluminum	237 j	1050 j
Aluminum (Filtered)	< 40 Fj	< 40 Fj
Antimony	< 3	< 3
Antimony (Filtered)	5.2 Frr	5.2 Frr
Arsenic	< 2.5 j	< 2.5 j
Arsenic (Filtered)	< 2.5 Fj	< 2.5 Fj
Barium	62.1	74.8
Barium (Filtered)	60.8 F	58.3 F
Beryllium	< 5	< 5
Beryllium (Filtered)	< 5 F	< 5 F
Cadmium	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F
Calcium	71800 j	81800 j
Calcium (Filtered)	73000 Fj	73000 Fj
Chromium	< 10	< 10
Chromium (Filtered)	< 10 F	< 10 F
Cobalt	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C25. E1 Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Surface Water Samples Analytical Results

Sample Name:	SM022SW001	SM022SW002
Depth (feet):	0	0
Sample Date:	02/16/94	02/16/94
Analytes		
-----		
Metals		
Copper	6.36	11.4
Copper (Filtered)	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5
Iron	458 J	1720 J
Iron (Filtered)	53.5 FJ	< 45 FJ
Lead	3	< 2
Lead (Filtered)	< 2 F	< 2 F
Magnesium	19900 J	22200 J
Magnesium (Filtered)	20200 FJ	20300 FJ
Manganese	45.5	102
Manganese (Filtered)	35.1 F	32.4 F
Mercury	< .2	< .2
Mercury (Filtered)	< .2 F	< .2 F
Nickel	< 15	< 15
Nickel (Filtered)	< 15 F	< 15 F
Potassium	5620	3670
Potassium (Filtered)	5330 F	3570 F
Selenium	< 2.5 J	< 2.5 J

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C25. E1 Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Surface Water Samples Analytical Results

Sample Name:	SM022SW001	SM022SW002
Depth (feet):	0	0
Sample Date:	02/16/94	02/16/94
Analytes		
-----		
Metals		
Selenium (Filtered)	< 2.5 Fj	< 2.5 Fj
Silver	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F
Sodium	94700 /I	93300 /I
Sodium (Filtered)	96800 F/I	95000 F/I
Thallium	< 2.5 j	< 2.5
Thallium (Filtered)	< 2.5 Fj	< 2.5 Fj
Vanadium	< 10	< 10
Vanadium (Filtered)	< 10 F	< 10 F
Zinc	< 20	20.3
Zinc (Filtered)	< 20 F	< 20 F

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C26. EI Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Sediment Samples Analytical Results

Sample Name: SM022SE001 SM022SE002  
Depth (feet): .5  
Sample Date: 02/16/94 02/16/94

Analytes

Metals

Aluminum	8420	4970
Antimony	< 5 j	< 5 j
Arsenic	9.42 j	4.21 j
Barium	84.2	< 39.8
Beryllium	< .5	< .5
Cadmium	< .5	< .5
Calcium	72100	91800
Chromium	15.2	9.56
Cobalt	7.01	4.21
Copper	80.2	22.9
Cyanide	< .25	< .25
Iron	16800	10900
Lead	361	24.9
Magnesium	19600	12800
Manganese	962	363
Mercury	< .1	< .1
Nickel	19.8	11.9
Potassium	1540	880

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C26. EI Site SM22: Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812  
Sediment Samples Analytical Results

Sample Name:	SM022SE001	SM022SE002
Depth (feet):	.5	.5
Sample Date:	02/16/94	02/16/94
Analytes		
-----		
Metals		
Selenium	< .25 rr	< .25 rr
Silver	< .5	< .5
Sodium	822	707
Thallium	< 10	< 10
Vanadium	20	14.3
Zinc	144	59.3

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C27. EI Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Soil Samples Analytical Results

Sample Name:	SM023SS001	SM023SS002	SM023SS003	SM023SS004	SM023SS005	SM023SS005-DUP
Depth (feet):	0	0	0	0	0	0
Sample Date:	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93
Analytes						
-----						
Metals						
Aluminum	3480	3340	2220	4730	5140	4340 D
Antimony	684	23.9	10	1540	12.3	32.2 D
Arsenic	14 j/1	7.2 j/1	8.9 j/1	15 j/1	19 j/1	700 Dj/1
Barium	< 39.8	< 39.8	< 39.8	< 39.8	< 39.8	< 39.8 D
Beryllium	< .5	< .5	< .5	< .5	< .5	< .5 D
Cadmium	< .5	< .5	< .5	< .5	< .5	< .5 D
Calcium	62400	68000	92300	33000	69000	50300 D
Chromium	6.12 j	6.09 j	4.89 j	9.46 j	8.8 j	7.83 Dj
Cobalt	4.32	4.53	3	6.49	5.55	6.01 D
Copper	180 j	45.3 j	24.5 j	165 j	55.5 j	60.1 Dj
Cyanide	< .25	< .25	< .25	< .25	< .25	< .25 D
Iron	9000	9670	7560	10800	11900	12000 D
Lead	96000 j	3100 j	523 j	99000 j	798 j	1680 Dj
Magnesium	11300	15500	32300	8690	12000	12400 D
Manganese	288	298	211	253	338	350 D
Mercury	< .1	< .1	< .1	< .1	< .1	< .1 D
Nickel	32.4 j	15.5 j	15.6 j	13.2 j	18.9 j	19.6 Dj
Potassium	612	621	423	539	974	825 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C27. E1 Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Soil Samples Analytical Results

Sample Name:	SM023SS001	SM023SS002	SM023SS003	SM023SS004	SM023SS005	SM023SS005-DUP
Depth (feet):	0	0	0	0	0	0
Sample Date:	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93
Analytes						
-----						
Metals						
Selenium	< .25 rr	< .25 rr	< .25 rr	< .25 rr	< .25 rr	< .25 Drr
Silver	5.16 j	< .5 j	< .5 j	2.09 j	< .5 j	< .5 Dj
Sodium	360	406	400	352	785	448 D
Thallium	< 100 j	27.4 j	21.1 j	< 100 j	28.4 j	28 Dj
Vanadium	9.72	8.95	7.34	14.3	13.5	12.9 D
Zinc	45.6 j	37 j	23.4 j	52.8 j	51.4 j	55.9 Dj

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C27. E1 Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Soil Samples Analytical Results

Sample Name:	SM023SS006	SM023SS007	SM023SS008	SM023SS009	SM023SS010
Depth (feet):	0	0	0	0	0
Sample Date:	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93
Analytes					
-----					
Metals					
Aluminum	2800	4170	4540	9790	3090
Antimony	524	18.5	488	13.4	< 5
Arsenic	7.3 j/1	46 j/1	11 j/1	24 j/1	7.7 j/1
Barium	< 39.8	< 39.8	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	120000	78700	51000	12500	38600
Chromium	5.6 j	7.52 j	7.94 j	14.7 j	6.56 j
Cobalt	3.53	3.94	4.08	10.7	5.02
Copper	54.8 j	26.6 j	261 j	91.2 j	20.6 j
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	7800	9490	10400	18800	8880
Lead	37000 j	2660 j	68000 j	1740 j	180 j
Magnesium	18300	16200	14700	6840	15400
Manganese	378	278	249	362	283
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	13.4 j	11.6 j	12.5 j	33.5 j	12 j
Potassium	524	822	760	1610	553

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C27. EI Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Soil Samples Analytical Results

Sample Name:	SM023SS006	SM023SS007	SM023SS008	SM023SS009	SM023SS010
Depth (feet):	0	0	0	0	0
Sample Date:	12/08/93	12/08/93	12/08/93	12/08/93	12/08/93
Analytes					
-----					
Metals					
Selenium	< .25 rr	< .25 rr	< .25 rr	< .25 rr	< .25 rr
Silver	< .5 j	< .5 j	1.36 j	< .5 j	< .5 j
Sodium	402	382	374	402	412
Thallium	< 100 j	28.9 j	< 100 j	20.1 j	32.2 j
Vanadium	6.46	13.9	14.7	25.5	11.7
Zinc	32.9 j	40.5 j	60.1 j	65.7 j	48.9 j

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C28. E1 Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Subsurface Soil Samples Analytical Results

Sample Name:	SM023SB001	SM023SB002	SM023SB003	SM023SB004	SM023SB004-DUP	SM023SB005
Depth (feet):	2.5	2.4	2.5	2.5	2.5	2.5
Sample Date:	12/09/93	12/09/93	12/09/93	12/09/93	12/09/93	12/09/93
<b>Analytes</b>						
-----						
<b>Metals</b>						
Aluminum	3440	2410	9150	3160	6470 D	3110
Antimony	< 5	< 5	< 5	< 5	< 5 D	< 5
Arsenic	4.6 j	8.8 j	3.99 j	6.8 j	8.9 Dj	4.84 j
Barium	< 39.8	< 39.8	58.7	< 39.8	50.2 D	81.8
Beryllium	< .5	< .5	< .5	< .5	< .5 D	< .5
Cadmium	< .5	< .5	< .5	< .5	< .5 D	< .5
Calcium	81500	110000	16400	79100	67000 D	48400
Chromium	7 j	5.27 j	14.1 j	5.99 j	12.3 Dj	5.41 j
Cobalt	4.25	2.63	7.75	4.18	7.59 D	3.69
Copper	12.6 j	14.3 j	31.7 j	12.4 j	14.5 Dj	21.9 j
Cyanide	< .25	< .25	< .25	< .25	< .25 D	< .25
Iron	10600	7350	21100	8470	15600 D	8290
Lead	10.7 j	58.2 j	164 j	93.8 j	30.1 Dj	230 j
Magnesium	16100	18700	6340	14700	15600 D	13800
Manganese	172	176	528	237	324 D	242
Mercury	< .1	< .1	< .1	< .1	< .1 D	< .1
Nickel	10.4 j	11 j	34 j	11.3 j	19 Dj	11.1 j
Potassium	540	483	904	621	1450 D	588

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C28. E1 Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Subsurface Soil Samples Analytical Results

Sample Name:	SM023SB001	SM023SB002	SM023SB003	SM023SB004	SM023SB004-DUP	SM023SB005
Depth (feet):	2.5	2.4	2.5	2.5	2.5	2.5
Sample Date:	12/09/93	12/09/93	12/09/93	12/09/93	12/09/93	12/09/93
Analytes						
-----						
Metals						
Selenium	< .25 j	< .25 j	< .25 j	< .25 j	< .25 Dj	< .25 j
Silver	< .5 j	< .5 j	< .5 j	< .5 j	< .5 Dj	< .5 j
Sodium	402	384	364	395	424 D	449
Thallium	28.7 j	27.4 j	20 j	23.7 j	29 Dj	26.5 j
Vanadium	10.8	6.59	24.6	9.38	13.4 D	9.33
Zinc	39 j	25.2 j	76.3 j	30.5 j	43.5 Dj	73.7 j

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C29. EI Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Water Samples Analytical Results

Sample Name:	SM023SH001	SM023SH002	SM023SH002-DUP
Depth (feet):	0	0	0
Sample Date:	02/17/94	02/17/94	02/17/94

Analytes

Metals

Aluminum	193 J	959 J	881 DJ
Aluminum (Filtered)	< 40 FJ	< 40 FJ	< 40 DFJ
Antimony	< 3	< 3	< 3 D
Antimony (Filtered)	5.2 Frr	4.6 Frr	5.1 DFrr
Arsenic	< 2.5 J	< 2.5 J	< 2.5 DJ
Arsenic (Filtered)	< 2.5 FJ	< 2.5 FJ	< 2.5 DFJ
Barium	80.6	89.3	90.1 D
Barium (Filtered)	77.3 F	79.4 F	79 DF
Beryllium	< 5	< 5	< 5 D
Beryllium (Filtered)	< 5 F	< 5 F	< 5 DF
Cadmium	< 5	< 5	< 5 D
Cadmium (Filtered)	< 5 F	< 5 F	< 5 DF
Calcium	82600 J	88100 J	91600 DJ
Calcium (Filtered)	82100 FJ	84300 FJ	85200 DFJ
Chromium	< 10	< 10	< 10 D
Chromium (Filtered)	< 10 F	< 10 F	< 10 DF
Cobalt	< 20	< 20	< 20 D
Cobalt (Filtered)	< 20 F	< 20 F	< 20 DF

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C29. EI Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Water Samples Analytical Results

Sample Name:	SM023SW001	SM023SW002	SM023SW002-DUP
Depth (feet):	0	0	0
Sample Date:	02/17/94	02/17/94	02/17/94
Analytes			
-----			
Metals			
Copper	< 5	< 5	< 5 D
Copper (Filtered)	5.7 F	5.61 F	< 5 DF
Cyanide	< 2.5	< 2.5	< 2.5 D
Iron	413 j	1550 j	1480 Dj
Iron (Filtered)	< 45 Fj	74.4 Fj	60.7 DFj
Lead	< 2 b	3.2 b	3.9 Db
Lead (Filtered)	< 2 F	4.2 Fb	< 2 DF
Magnesium	24900 j	26500 j	27100 Dj
Magnesium (Filtered)	24900 Fj	25400 Fj	25400 DFj
Manganese	46.5	72.9	75.3 D
Manganese (Filtered)	43.1 F	46.5 F	46.9 DF
Mercury	< .2	< .2	< .2 D
Mercury (Filtered)	< .2 F	< .2 F	< .2 DF
Nickel	< 15	< 15	< 15 D
Nickel (Filtered)	< 15 F	< 15 F	< 15 DF
Potassium	2570	2760	3100 D
Potassium (Filtered)	2520 F	2690 F	2690 DF
Selenium	< 2.5 j	< 2.5 j	< 2.5 Dj

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C29. EI Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Surface Water Samples Analytical Results

Sample Name:	SM023SW001	SM023SW002	SM023SW002-DUP
Depth (feet):	0	0	0
Sample Date:	02/17/94	02/17/94	02/17/94
Analytes			
-----			
Metals			
Selenium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 DFj
Silver	< 5	< 5	< 5 D
Silver (Filtered)	< 5 F	< 5 F	< 5 DF
Sodium	86200 /I	87700 /I	89200 D/I
Sodium (Filtered)	86900 F/I	88200 F/I	88500 DF/I
Thallium	< 2.5 j	< 2.5 j	< 2.5 DJ
Thallium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 DFj
Vanadium	< 10	< 10	< 10 D
Vanadium (Filtered)	< 10 F	< 10 F	< 10 DF
Zinc	< 20	< 20	< 20 D
Zinc (Filtered)	< 20 F	< 20 F	< 20 DF

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C30. E1 Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Sediment Samples Analytical Results

Sample Name: SM023SE001 SM023SE002  
Depth (feet): 0 0  
Sample Date: 02/17/94 02/17/94

Analytes

Metals

Aluminum	2880	6170
Antimony	< 5 j	28.4 j
Arsenic	4.76 j	8.15 j
Barium	< 39.8	< 39.8
Beryllium	< .5	< .5
Cadmium	< .5	< .5
Calcium	72700	112000
Chromium	5.26	8.77
Cobalt	3.51	5.19
Copper	8.4	14.8
Cyanide	< .25	< .25
Iron	6520	11600
Lead	6.52	827
Magnesium	20100	13600
Manganese	201	284
Mercury	< .1	< .1
Nickel	9.27	14.8
Potassium	614	1480

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C30. E1 Site SM23: Firing Range, State Police Pistol  
Range, Near Building 815  
Sediment Samples Analytical Results

Sample Name:	SM023SE001	SM023SE002
Depth (feet):	0	0
Sample Date:	02/17/94	02/17/94
Analytes		
-----		
Metals		
Selenium	< .25 rr	< .25 rr
Silver	< .5	< .5
Sodium	489	506
Thallium	< 10	< 10
Vanadium	8.4	13.6
Zinc	28.8	32.1

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table C31. EI Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name:	SM024SS001	SM024SS001-DUP	SM024SS002	SM024SS003	SM024SS004	SM024SS005
Depth (feet):	0	0	0	0	0	0
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Aluminum	11300	10900 D	12100	10000	9760	3030
Antimony	< 5 J	< 5 D J	< 5 J	< 5 J	350 J	14000 J
Arsenic	970 J	11 D J	21 J	7.39 J	17 J	1200 J
Barium	82.5	84.6 D	87.4	62.8	80.9	< 39.8
Beryllium	< .5	< .5 D	< .5	< .5	< .5	< .5
Cadmium	.858	< .5 D	< .5	< .5	< .5	< .5
Calcium	29100	32500 D	17800	30700	11000	31700
Chromium	15.7	15.4 D	14.8	13.1	13.9	5.38
Cobalt	9.22	9.92 D	6.22	5.44	6	2.9
Copper	24.3	26 D	19.3	22.3	26.5	29
Cyanide	< .25	< .25 D	< .25	< .25	< .25	< .25
Iron	16200	17900 D	17800	13900	15300	5660
Lead	340	423 D	859	126	56000	110000
Magnesium	13100	15400 D	10400	9900	6420	13000
Manganese	534	602 D	578	516	530	331
Mercury	< .1	< .1 D	< .1	< .1	.363	< .1
Nickel	19.4	21.1 D	17.8	15.3	16.7	9.1
Potassium	1780	1630 D	1930	1810	1670	566

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C31. E1 Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822

## Surface Soil Samples Analytical Results

Sample Name:	SM024SS001	SM024SS001-DUP	SM024SS002	SM024SS003	SM024SS004	SM024SS005
Depth (feet):	0	0	0	0	0	0
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Selenium	< 1.2 rr	.959 DJ/N	< .25 rr	< .25 rr	< .25 rr	< 1.2 rr/N
Silver	< .5	< .5 D	< .5	< .5	3.21	9.52
Sodium	534	650 D	430	377	488	386
Thallium	< 10	< 10 D	< 10	< 10	< 10	< 10
Vanadium	25.9	26 D	28.1	22.3	22.3	7.31
Zinc	102	104 D	81.5	87.9	82.3	29

-----  
 Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C31. E1 Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name:	SM024SS006	SM024SS007	SM024SS008	SM024SS009	SM024SS010	SM024SS010-DUP
Depth (feet):	0	0	0	0	0	0
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Aluminum	9150	7620	8290	11100	11600	7540 D
Antimony	< 5 j	3100 j	1400 j	< 5 j	78.1 j	4800 Dj
Arsenic	8 j	15 j	84 j	14 j	25 j	91 Drr
Barium	< 39.8	63.8	61.4	78	82.8	69 D
Beryllium	< .5	< .5	< .5	< .5	< .5	< .5 D
Cadmium	< .5	< .5	< .5	< .5	< .5	< .5 D
Calcium	11900	17100	5290	2730	23400	19300 D
Chromium	14.3	10.1	11.7	15.6	15.6	11.1 D
Cobalt	4.98	4.98	6.14	7.15	7.66	7.06 D
Copper	14	18.7	25.7	16.9	25	64.2 D
Cyanide	< .25	< .25	< .25	< .25	< .25	< .25 D
Iron	13500	12100	13400	15600	17200	14000 D
Lead	65.8	120000	57000	455	6880	96000 D
Magnesium	4980	8400	3570	2600	11100	9310 D
Manganese	433	467	557	702	563	514 D
Mercury	< .1	< .1	< .1	< .1	< .1	< .1 D
Nickel	14.1	13.1	15.7	16.9	18.8	16.1 D
Potassium	1770	1180	1710	1820	1880	995 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C31. EI Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name:	SM024SS006	SM024SS007	SM024SS008	SM024SS009	SM024SS010	SM024SS010-DUP
Depth (feet):	0	0	0	0	0	0
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Selenium	< .5 rr/N	< .25 rr/N	< .5 rr/N	< .25 rr/N	< .25 rr/N	< .25 Drr/N
Silver	< .5	2.64	2.71	< .5	< .5	1.03 D
Sodium	369	467	386	377	563	610 D
Thallium	< 10	< 10	< 10	< 10	< 10	< 10 D
Vanadium	22.5	15.6	18.6	26	26.6	17.7 D
Zinc	53	56	77.1	65	89.1	78.7 D

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Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table C31. EI Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name:	SM024SS011	SM024SS012	SM024SS013	SM024SS014	SM024SS015	SM024SS016
Depth (feet):	0	0	0	0	0	0
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Aluminum	8960	9220	9490	7050	14900	16700
Antimony	< 5 j	880 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	6.4 j	140 j	8.4 j	9.6 j	9.7 j	1700 j
Barium	60.2	68.8	58	< 39.8	83.9	118
Beryllium	< .5	< .5	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5	< .5	< .5
Calcium	3840	22000	7640	18300	3920	18200
Chromium	12.5	12.7	13.2	10.3	18.9	21.2
Cobalt	5.89	6.3	6.06	5.22	8.12	8.64
Copper	15.4	20.5	15.8	16.9	18.9	27.3
Cyanide	< .25	< .25	< .25	< .25	< .25	< .25
Iron	14100	14300	15800	13000	20300	22700
Lead	119	100000	83	226	135	1320
Magnesium	2820	11600	4080	9310	3790	10800
Manganese	589	469	527	480	622	773
Mercury	< .1	< .1	< .1	< .1	< .1	< .1
Nickel	14.1	16.1	15.8	13.8	21.7	24.2
Potassium	1540	1320	1710	1070	2440	3180

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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C31. E1 Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name:	SM024SS011	SM024SS012	SM024SS013	SM024SS014	SM024SS015	SM024SS016
Depth (feet):	0	0	0	0	0	0
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Selenium	< .25 rr/N	.41 rr/N	< .25 rr/N	< .25 rr/N	< .25 rr/N	< 1.2 rr/N
Silver	< .5	2.78	< .5	< .5	< .5	< .5
Sodium	384	439	395	409	487	621
Thallium	< 10	< 10	< 10	< 10	< 10	< 10
Vanadium	21.8	19	23.7	18.3	36.5	40.9
Zinc	65.3	71.7	60.6	56.4	70.4	121

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C31. E1 Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name: SM024SS017  
Depth (feet): 0  
Sample Date: 02/19/94

Analytes

Metals

Aluminum	10700
Antimony	< 5 j
Arsenic	8.1 j
Barium	81.2
Beryllium	< .5
Cadmium	< .5
Calcium	3730
Chromium	14.8
Cobalt	9.42
Copper	21.1
Cyanide	< .25
Iron	17900
Lead	308
Magnesium	2920
Manganese	763
Mercury	< .1
Nickel	19.5
Potassium	1620

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C31. EI Site SM24: Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822  
Surface Soil Samples Analytical Results

Sample Name: SM024SS017  
Depth (feet): 0  
Sample Date: 02/19/94

Analytes

Metals

Selenium	< .25	rr/N
Silver	< .5	
Sodium	568	
Thallium	< 10	
Vanadium	26	
Zinc	74.7	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C32. E1 Site SM24: Firing Range, Skeet Rifle Range,  
Near Buildings 819 Through 822  
Subsurface Soil Samples Analytical Results

Sample Name:	SM024SB001	SM024SB002	SM024SB002-DUP	SM024SB003	SM024SB004	SM024SB005
Depth (feet):	2.5	2	2.5	.8	2	2.5
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Aluminum	16200	7970	5730 D	9460	11700	5170
Antimony	< 5 j	< 5 j	< 5 Dj	< 5 j	< 5 j	< 5 j
Arsenic	6.5 j	4.9 j	4.8 D	7.5 j	7.7 j	9.4 j
Barium	111	52.8	< 39.8 D	62.2	91.5	< 39.8
Beryllium	< .5	< .5	< .5 D	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5 D	< .5	< .5	< .5
Calcium	27100	24600	31100 D	58300	10700	110000
Chromium	18.9	10.6	7.89 D	11.8	16.8	6.86
Cobalt	7.44	4.1	3.23 D	5.31	7.34	2.25 JP
Copper	18.9	9.03	6.33 D	23.3	19.3	9.67
Cyanide	< .25	< .25	< .25 D	< .25	< .25	< .25
Iron	21700	11500	8840 D	13000	18100	6860
Lead	11.2	27	< 5 D	89.4	20.5	63
Magnesium	14900	9850	9680 D	11100	5660	70900
Manganese	474	375	287 D	544	638	225
Mercury	< .1	< .1	< .1 D	< .1	.215	< .1
Nickel	18.9	9.85	7.29 D	13	18.1	7.31
Potassium	1760	1100	765 D	1550	1680	765

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C32. E1 Site SM24: Firing Range, Skeet Rifle Range,  
Near Buildings 819 Through 822  
Subsurface Soil Samples Analytical Results

Sample Name:	SM024SB001	SM024SB002	SM024SB002-DUP	SM024SB003	SM024SB004	SM024SB005
Depth (feet):	2.5	2	2.5	.8	2	2.5
Sample Date:	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94	02/19/94
Analytes						
-----						
Metals						
Selenium	< .25 rr/N	< .25 rr/N	< .25 Drr	< .5 rr/N	< .25 rr/N	< .25 rr/N
Silver	< .5	< .5	< .5 D	.907	3.01	< .5
Sodium	514	457	418 D	427	433	461
Thallium	20.3	< 10	< 10 D	< 10	< 10	< 10
Vanadium	32.5	19.9	14.3 D	22	27.7	12.4
Zinc	71.7	34	25.1 D	79	73.4	31.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C32. E1 Site SM24: Firing Range, Skeet Rifle Range,  
Near Buildings 819 Through 822  
Subsurface Soil Samples Analytical Results

Sample Name: SM024SB006 SM024SB007  
Depth (feet): 2.5 2.5  
Sample Date: 02/22/94 04/06/94

Analytes

-----

Metals

Aluminum	6630	7080
Antimony	< 5 j	< 5
Arsenic	1.7	9 j
Barium	59	< 39.8
Beryllium	< .5	< .5
Cadmium	< .5	< .5
Calcium	33200	4180
Chromium	9.71	10.4
Cobalt	4.91	5.8
Copper	13.5	13.9
Cyanide	< .25	< .25
Iron	12300	15100
Lead	13.5	10.2
Magnesium	12300	2670
Manganese	430	360
Mercury	< .1	< .1
Nickel	12.3	17.4
Potassium	663	742

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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C32. E1 Site SM24: Firing Range, Skeet Rifle Range,  
Near Buildings 819 Through 822  
Subsurface Soil Samples Analytical Results

Sample Name: SM024SB006 SM024SB007  
Depth (feet): 2.5 2.5  
Sample Date: 02/22/94 04/06/94

Analytes

Metals

Selenium	< .25	rr	< .25	rr
Silver	< .5		< .5	
Sodium	455		371	
Thallium	< 10		< 10	
Vanadium	16		17.4	
Zinc	45.5		44.1	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25BSS001 0 02/07/94	SM25BSS001-DUP 0 02/07/94	SM25BSS002 0 02/07/94	SM25BSS003 0 02/07/94
Analytes				
-----				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14 D	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14 D	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14 D	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14 D	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3 D	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3 D	< .3	< .3
2,4-Dichlorophenol	< .14	< .14 D	< .14	< .14
2,4-Dimethylphenol	< .14	< .14 D	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4 D	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14 D	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14 D	< .14	< .14
2-Chloronaphthalene	< .14	< .14 D	< .14	< .14
2-Chlorophenol	< .14	< .14 D	< .14	< .14
2-Methylnaphthalene	< .14	< .14 D	< .14	< .14
2-Methylphenol	< .14	< .14 D	< .14	< .14
2-Nitroaniline	< .67	< .67 D	< .67	< .67
2-Nitrophenol	< .14	< .14 D	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67 D	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS001	SM25BSS001-DUP	SM25BSS002	SM25BSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94
<b>Analytes</b>				
-----				
Semivolatile Organic Compounds				
3-Nitroaniline	< .67 j	< .67 Dj	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4 D	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14 D	< .14	< .14
4-Chloroaniline	< .3	< .3 D	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14 D	< .14	< .14
4-Methylphenol	< .14	< .14 D	< .14	< .14
4-Nitroaniline	< .67	< .67 D	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4 D	< 1.4	< 1.4
Acenaphthene	< .14	< .14 D	< .14	< .14
Acenaphthylene	< .14	< .14 D	< .14	< .14
Anthracene	.23	.21 D	< .14	< .14
Benzo[A]anthracene	1.2	1 D	< .14	< .14
Benzo[B]fluoranthene	1.8	1.5 D	< .14	< .14
Benzo[G,H,I]perylene	.93	.83 D	< .16	< .16
Benzo[K]fluoranthene	.76	.68 D	< .14	< .14
Benzo[a]pyrene	1.3	1.2 D	< .14	< .14
Benzo[e]pyrene	.85 S	.75 S	NA	NA
Benzoic acid	< 1.4	< 1.4 D	< 1.4	< 1.4
Benzyol alcohol	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS001	SM25BSS001-DUP	SM25BSS002	SM25BSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94
Analytes				
-----				
Semivolatiles Organic Compounds				
Bis (2-Ethylhexyl) phthalate	1.9 Bb	.41 DBb	< .14	3.7 Bb
Butylbenzylphthalate	< .14	< .14 D	< .14	< .14
Carbazole	< .14	< .14 D	< .14	< .14
Chrysene	1.4	1.3 D	< .14	< .14
Di-N-butyl phthalate	< .14	< .14 D	< .14	< .14
Di-N-octyl phthalate	< .14	< .14 D	< .14	< .14
Dibenzo[A,H]anthracene	.25	.21 D	< .16	< .16
Dibenzofuran	< .14	< .14 D	< .14	< .14
Diethylphthalate	< .14	< .14 D	< .14	< .14
Dimethylphthalate	< .14	< .14 D	< .14	< .14
Docosane	NA	.5 Sj	NA	NA
Eicosane	NA	.63 Sj	NA	NA
Fluoranthene	2.3	2.1 D	.18 JP	< .14
Fluorene	< .14	< .14 D	< .14	< .14
Heneicosane	.36 S	1 S	NA	NA
Heptacosane	NA	NA	.53 S	NA
Hexachlorobenzene	< .14	< .14 D	< .14	< .14
Hexachlorobutadiene	< .14	< .14 D	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1 D	< 1	< 1

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25BSS001 0 02/07/94	SM25BSS001-DUP 0 02/07/94	SM25BSS002 0 02/07/94	SM25BSS003 0 02/07/94
Analytes				
Semivolatiles Organic Compounds				
Hexachloroethane	< .14	< .14 D	< .14	< .14
Indeno[1,2,3-c,d]pyrene	1	.9 D	< .16	< .16
Isophorone	< .14	< .14 D	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14 D	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14 D	< .14	< .14
Naphthalene	< .14	< .14 D	< .14	< .14
Nitrobenzene	< .14	< .14 D	< .14	< .14
Nonacosane	.97 S	.88 S	.66 S	.41 S
Palmitic acid / Hexadecanoic acid	.36 S	.75 S	NA	NA
Pentachlorophenol	< .67	< .67 D	< .67	< .67
Phenanthrene	1	.95 D	< .14	< .14
Phenol	< .14	< .14 D	< .14	< .14
Pyrene	1.9	1.6 D	< .14	< .14
Tricosane / n-Tricosane	NA	.38 Sj	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14 D	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14 D	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14 D	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Ctionaste	NA	.75 S	NA	.41 S
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003 D	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table C33. E1 Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS001	SM25BSS001-DUP	SM25BSS002	SM25BSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003 D	< .003 rr	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003 D	< .003	< .003
Aldrin	< .003	< .003 Dj	< .003	< .003
Dieldrin	< .003	< .003 D	< .003	< .003
Dimethoate	< .033 j	< .033 Dj	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003 D	< .003	< .003
Endrin	< .003	< .003 D	< .003	< .003
Endrin aldehyde	< .022	< .022 D	< .022	< .022
Endrin ketone	< .003	< .003 D	< .003	< .003
Heptachlor	< .003	< .003 D	< .003	< .003
Heptachlor epoxide	< .003	< .003 D	< .003	< .003
Lindane	< .003	< .003 D	< .003	< .003
Methoxychlor	< .003	< .003 D	< .003	< .003
PCB 1016	< .013	< .013 D	< .013	< .013
PCB 1221	< .013	< .013 D	< .013	< .013
PCB 1232	< .013	< .013 D	< .013	< .013
PCB 1242	< .013	< .013 D	< .013	< .013
PCB 1248	< .013	< .013 D	< .013	< .013
PCB 1254	< .013	< .013 D	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C33. E1 Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25BSS001 0 02/07/94	SM25BSS001-DUP 0 02/07/94	SM25BSS002 0 02/07/94	SM25BSS003 0 02/07/94
Analytes				
Pesticides/PCBs				
PCB 1260	< .013	< .013 D/I	< .013	< .013
Toxaphene	< .3	< .3 D	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003 D	< .003	< .003
alpha-Chlordane	< .003	< .003 D	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003 D	< .003	< .003
beta-Benzenehexachloride	< .003	< .003 D	< .003	.0205 C
beta-Endosulfan/Endosulfan II	< .003	< .003 D	< .003	< .003
delta-Benzenehexachloride	< .003	< .003 D	< .003	< .003
gamma-Chlordane	< .003	< .003 D	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01 D	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01 D	< .01	< .01
245T	< .01 J	< .01 D	< .01 J	< .01 J
245TP	< .01	< .01 D	< .01	< .01
Dalapon	< .01	< .01 D	< .01	< .01
Dicamba	< .01	< .01 D	< .01	< .01
Dichloroprop	< .01	< .01 D	< .01	< .01
Dinoseb	< .01	< .01 D	< .01	< .01
MCPA	< .2	< .2 D	< .2	< .2
MCPB	< .2	< .2 D	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS001	SM25BSS001-DUP	SM25BSS002	SM25BSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94
Analytes				
-----				
Metals				
Aluminum	7370	7540 D	8280	9020
Antimony	< 5 j	< 5 D j	< 5 j	< 5 j
Arsenic	7.85 j	5.28 D j	4.34 j	4.92 j
Barium	68.8	72.9 D	80.2	69.7
Beryllium	< .5	< .5 D	< .5	< .5
Boron	12.1	16.3 D	13.1	9.43
Cadmium	< .5	.666 D	< .5	< .5
Calcium	4350	5530 D	2500	2320
Chromium	15.7	11.8 D	11.7	12.4
Cobalt	7.61	7.66 D	8.67	9.7
Copper	21.7	25.1 D	17.1	15
Cyanide	< .25	< .25 D	< .25	< .25
Iron	14500	18800 D	14500	15000
Lead	121	126 D	49.9	27.3
Magnesium	2900	2390 D	1970	2190
Manganese	531	565 D	670	751
Mercury	.355	.322 D	< .1	< .1
Nickel	16.9	16.3 D	14.5	15
Potassium	833	930 D	986	1010

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name: SM25BSS001 SM25BSS001-DUP SM25BSS002 SM25BSS003  
Depth (feet): 0 0 0 0  
Sample Date: 02/07/94 02/07/94 02/07/94 02/07/94

Analytes

Metals

Selenium	< .25 rr	.364 Drr/J	< .25 rr	< .25 rr
Silver	< .5	< .5 D	< .5	< .5
Sodium	374	477 D	407	464
Thallium	< 10	< 10 D	< 10	< 10
Vanadium	20.5	21.4 D	21	23.2
Zinc	94.2	98 D	92	57.4

Landfill Parameters

Ammonia	232	190 Dj	238 j	249 j
Chloride	< 5 j	< 5 D	< 5	< 5
Fluoride	< 2.5 j	< 2.5 D	3.84 bj	3.99 bj
Nitrite, Nitrate -- Non-Specific	7.27 j	5.39 D	7.48 j	6.37 j
Sulfate	< 25 j	< 25 D	< 25	< 25

Total Organic Carbon

Total recoverable phenolics	44000 j	26000 Dj	28000 j	25000 j
pH	2.29	1.73 Db	1.63 b	2.04 b
	7.8 rr	7.6 Drr	6.3 rr	6.7 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25BSS004 0 02/07/94	SM25BSS005 0 02/07/94	SM25BSS006 0 02/07/94
Analytes			
Semivolatile Organic Compounds			
1,2,4-Trichlorobenzene	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. El Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS004	SM25BSS005	SM25BSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
<hr/>			
Analytes			
<hr/>			
Semivolatile Organic Compounds			
3-Nitroaniline	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14
Benzo [A] anthracene	< .14	< .14	< .14
Benzo [B] fluoranthene	< .14	< .14	< .14
Benzo [G,H,I] perylene	< .16	< .16	< .16
Benzo [K] fluoranthene	< .14	< .14	< .14
Benzo [a] pyrene	< .14	< .14	< .14
Benzo [e] pyrene	NA	NA	NA
Benzoic acid	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS004	SM25BSS005	SM25BSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
Analytes			
Semivolatile Organic Compounds			
Bis (2-Ethylhexyl) phthalate		.38 Bb	< .14
Butylbenzylphthalate	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14
Docosane	NA	NA	NA
Eicosane	NA	NA	NA
Fluoranthene	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14
Heneicosane	NA	NA	NA
Heptacosane	NA	.56 S	NA
Hexachlorobenzene	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS004	SM25BSS005	SM25BSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
<b>Analytes</b>			
-----			
<b>Semivolatiles Organic Compounds</b>			
Hexachloroethane	< .14	< .14	< .14
Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14
Nonacosane	NA	2.8 S	1.5 S
Palmitic acid / Hexadecanoic acid	NA	NA	.46 S
Pentachlorophenol	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14
Phenol	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14
Tricosane / n-Tricosane	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clonaste	NA	1.4 S	3.1 S
<b>Pesticides/PCBs</b>			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS004	SM25BSS005	SM25BSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
<hr/>			
Analytes			
<hr/>			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003
Endrin	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003
Lindane	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25BSS004 0 02/07/94	SM25BSS005 0 02/07/94	SM25BSS006 0 02/07/94
Analytes			
Pesticides/PCBs			
PCB 1260	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01
245T	< .01 j	< .01 j	< .01 j
245TP	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01 rr
Dichloroprop	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01
MCPA	< .2	< .2	< .2
MCPP	< .2	< .2	< .2 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS004	SM25BSS005	SM25BSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
Analytes			
-----			
Metals			
Aluminum	9700	9480	7790
Antimony	< 5 j	< 5 j	< 5 j
Arsenic	3.23 j	3.07 j	4.27 j
Barium	66	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5
Boron	11.7	12.4	13.6
Cadmium	< .5	< .5	< .5
Calcium	7280	2370	4120
Chromium	14.8	16.7	11.6
Cobalt	8.22	9.07	7.18
Copper	16.2	16.7	14.4
Cyanide	< .25	< .25	< .25
Iron	16200	18100	14000
Lead	21.6	25.1	29
Magnesium	5120	2370	2440
Manganese	553	614	565
Mercury	< .1	< .1	< .1
Nickel	18.9	19.5	14
Potassium	1130	1090	962

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C33. EI Site SM25b: Historic Military Site  
Surface Soil Sample Analytical Results

Sample Name:	SM25BSS004	SM25BSS005	SM25BSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
-----			
Analytes			
-----			
Metals			
Selenium	< .25 rr	< .25 rr	< .25 rr
Silver	< .5	< .5	< .5
Sodium	485	474	489
Thallium	< 10	< 10	< 10
Vanadium	24.3	26.5	19.8
Zinc	64.7	65.6	56.5
-----			
Landfill Parameters			
Ammonia	156 j	129 j	231 j
Chloride	< 5	< 5	< 5
Fluoride	3.94 bj	< 2.5 j	< 2.5 j
Nitrite, Nitrate -- Non-Specific	3.92 j	7.95 j	3.19 j
Sulfate	< 25	< 25	< 25
Total Organic Carbon	18000 j	23000 j	38000 j
Total recoverable phenolics	2.92 b	2.71 b	3.11 b
pH	7.8 rr	7.4 rr	7.6 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB001	SM25CSB001-DUP	SM25CSB002
Depth (feet):	2	6	1
Sample Date:	02/09/94	02/09/94	02/07/94
	5.5		
Analytes			
-----			
Volatile Organic Compounds			
1,1,1-Trichloroethane	< .01	< .01 D	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01 D	< .01
1,1,2-Trichloroethane	< .01	< .01 D	< .01
1,1-Dichloroethane	< .01	< .01 D	< .01
1,1-Dichloroethene	< .01	< .01 D	< .01
1,2-Dichloroethane	< .01	< .01 D	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01 D	< .01
1,2-Dichloropropane	< .01	< .01 D	< .01
2-Chloroethylvinyl ether	< .01	< .01 D	< .01
Acetic acid, vinyl ester	< .01	< .01 D	< .01 j
Acetone	< .01	< .01 D	.024 Bb
Benzene	< .01	< .01 D	< .01
Bromodichloromethane	< .01	< .01 D	< .01
Bromoform	< .01	< .01 D	< .01
Bromomethane	< .01	< .01 D	< .01
Carbon disulfide	< .01	< .01 D	< .01
Carbon tetrachloride	< .01	< .01 D	< .01
Chlorobenzene	< .01	< .01 D	< .01
Chloroethane	< .01	< .01 D	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB001	SM25CSB001-DUP	SM25CSB002
Depth (feet):	5.5	6	1
Sample Date:	02/09/94	02/09/94	02/07/94
Analytes			
-----			
Volatiles Organic Compounds			
Chloroform	< .01	< .01 D	< .01
Chloromethane	< .01	< .01 D	< .01
Dibromochloromethane	< .01	< .01 D	< .01
Ethylbenzene	< .01	< .01 D	< .01
Methyl-N-butyl ketone	< .01	< .01 D	< .01
Methylene chloride	< .01	< .01 D	< .01
Methylethyl ketone/2-Butanone	< .01	< .01 D	< .01
Methylisobutyl ketone	< .01	< .01 D	< .01
Styrene	< .01	< .01 D	< .01
Tetrachloroethene	< .01	< .01 D	< .01
Toluene	< .01	< .01 D	< .01
Trichloroethene	< .01	< .01 D	< .01
Trichlorofluoromethane	NA	NA	NA
Vinyl chloride	< .01	< .01 D	< .01
Xylenes, total combined	< .01	< .01 D	< .01
cis-1,3-Dichloropropene	< .01	< .01 D	< .01
trans-1,3-Dichloropropene	< .01	< .01 D	< .01
Semivolatiles Organic Compounds			
1,2,4-Trichlorobenzene	< .14	< .14 D	< .14
1,2-Dichlorobenzene	< .14	< .14 D	< .14

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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB001	SM25CSB001-DUP	SM25CSB002
Depth (feet):	2	6	1
Sample Date:	02/09/94	02/09/94	02/07/94
	5.5		
Analytes			
-----			
Semivolatile Organic Compounds			
1,3-Dichlorobenzene	< .14	< .14 D	< .14
1,4-Dichlorobenzene	< .14	< .14 D	< .14
2,4,5-Trichlorophenol	< .3	< .3 D	< .3
2,4,6-Trichlorophenol	< .3	< .3 D	< .3
2,4-Dichlorophenol	< .14	< .14 D	< .14
2,4-Dimethylphenol	< .14	< .14 D	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 Dj	< 1.4
2,4-Dinitrotoluene	< .14	< .14 D	< .14
2,6-Dinitrotoluene	< .14	< .14 D	< .14
2-Chloronaphthalene	< .14	< .14 D	< .14
2-Chlorophenol	< .14	< .14 D	< .14
2-Methylnaphthalene	< .14	< .14 D	< .14
2-Methylphenol	< .14	< .14 D	< .14
2-Nitroaniline	< .67	< .67 D	< .67
2-Nitrophenol	< .14	< .14 D	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67 Dj	< .67
3-Methyl-4-chlorophenol	< .14	< .14 D	< .14
3-Nitroaniline	< .67	< .67 D	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4 D	< 1.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CS8001	SM25CS8001	SM25CS8001-DUP	SM25CS8002
Depth (feet):	2	5.5	6	1
Sample Date:	02/09/94	02/09/94	02/09/94	02/07/94
<hr/>				
Analytes				
<hr/>				
Semivolatile Organic Compounds				
4-Bromophenylphenyl ether	< .14	< .14	< .14 D	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 Dj	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14 D	< .14
4-Methylphenol	< .14	< .14	< .14 D	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 Dj	< .67
<hr/>				
4-Nitrophenol	< 1.4	< 1.4	< 1.4 D	< 1.4
Acenaphthene	< .14	< .14	< .14 D	< .14
Acenaphthylene	< .14	< .14	< .14 D	< .14
Anthracene	< .14	< .14	< .14 D	< .14
Benzo[a]anthracene	< .14	< .14	< .14 D	< .14
<hr/>				
Benzo[b]fluoranthene	< .14	< .14	< .14 D	< .14
Benzo[g,h,i]perylene	< .16	< .16	< .16 D	< .16
Benzo[k]fluoranthene	< .14 j	< .14 j	< .14 Dj	< .14
Benzo[a]pyrene	< .14	< .14	< .14 D	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4 D	< 1.4
<hr/>				
Benzyl alcohol	< .14	< .14	< .14 D	< .14
Bis (2-Ethylhexyl) phthalate	2.3 Bb	.52 Bb	2 DBb	< .14
Butylbenzylphthalate	< .14	< .14	< .14 D	< .14
Carbazole	< .14	< .14	< .14 D	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB001 2 02/09/94	SM25CSB001 5.5 02/09/94	SM25CSB001-DUP 6 02/09/94	SM25CSB002 1 02/07/94
Analytes				
Semivolatiles Organic Compounds				
Chrysene	< .14	< .14	< .14 D	< .14
Di-N-butyl phthalate	.51 b	.17 JPb	.19 Db	< .14
Di-N-octyl phthalate	< .14	< .14	< .14 D	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16 D	< .16
Dibenzofuran	< .14	< .14	< .14 D	< .14
Diethylphthalate	< .14	< .14	< .14 D	< .14
Dimethylphthalate	< .14	< .14	< .14 D	< .14
Dodecane	NA	NA	NA	NA
Eicosane	NA	NA	NA	.4 S
Fluoranthene	< .14	< .14	< .14 D	< .14
Fluorene	< .14	< .14	< .14 D	< .14
Heneicosane	NA	NA	NA	NA
Heptacosane	NA	NA	NA	.93 S
Heptadecane	NA	NA	NA	.93 S
Hexachlorobenzene	< .14	< .14	< .14 D	< .14
Hexachlorobutadiene	< .14	< .14	< .14 D	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1 D	< 1
Hexachloroethane	< .14	< .14	< .14 D	< .14
Hexadecane	NA	NA	NA	.67 S

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB001 2 02/09/94	SM25CSB001 5.5 02/09/94	SM25CSB001-DUP 6 02/09/94	SM25CSB002 1 02/07/94
Analytes				
Semivolatiles Organic Compounds				
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16 D	< .16
Isophorone	< .14	< .14	< .14 D	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14 D	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14 D	< .14
Naphthalene	< .14	< .14	< .14 D	< .14
Nitrobenzene	< .14	< .14	< .14 D	< .14
Nonacosane	NA	NA	NA	.8 S
Nonadecane	NA	NA	NA	.93 S
Pentachlorophenol	< .67	< .67	< .67 D	< .67
Phenanthrene	< .14	< .14	< .14 D	< .14
Phenol	< .14	< .14	< .14 D	< .14
Pyrene	< .14	< .14	< .14 D	< .14
Tetradecane	NA	NA	NA	NA
Tridecane	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14 D	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14 D	< .14
bis (2-Chloroisopropyl) ether	< .14 j	< .14 j	< .14 Dj	< .14
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003 D	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003 D	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB001	SM25CSB001	SM25CSB001-DUP	SM25CSB002
Depth (feet):	2	5.5	6	1
Sample Date:	02/09/94	02/09/94	02/09/94	02/07/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003 D	< .003
Aldrin	< .003	< .003	< .003 D	< .003
Dieldrin	< .003	< .003	< .003 D	< .003
Dimethoate	< .033 j	< .033 j	< .033 D j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003 D	< .003
Endrin	< .003	< .003	< .003 D	< .003
Endrin aldehyde	< .022	< .022	< .022 D	< .022
Endrin ketone	< .003	< .003	< .003 D	< .003
Heptachlor	< .003	< .003	< .003 D	< .003
Heptachlor epoxide	< .003	< .003	< .003 D	< .003
Lindane	< .003	< .003	< .003 D	< .003
Methoxychlor	< .003	< .003	< .003 D	< .003
PCB 1016	< .013	< .013	< .013 D	< .013
PCB 1221	< .013	< .013	< .013 D	< .013
PCB 1232	< .013	< .013	< .013 D	< .013
PCB 1242	< .013	< .013	< .013 D	< .013
PCB 1248	< .013	< .013	< .013 D	< .013
PCB 1254	< .013	< .013	< .013 D	< .013
PCB 1260	< .013	< .013	< .013 D	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CS8001 2 02/09/94	SM25CS8001 5.5 02/09/94	SM25CS8001-DUP 6 02/09/94	SM25CS8002 1 02/07/94
Analytes				
Pesticides/PCBs				
Toxaphene	< .3	< .3	< .3 D	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003 D	< .003
alpha-Chlordane	< .003	< .003	< .003 D	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003 D	< .003
beta-Benzenhexachloride	< .003	< .003	< .003 D	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003 D	< .003
delta-Benzenhexachloride	< .003	< .003	< .003 D	< .003
gamma-Chlordane	< .003	< .003	< .003 D	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01 D	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01 D	< .01
245T	< .01	< .01	< .01 D	< .01 j
245TP	< .01	< .01	< .01 D	< .01
Dalapon	< .01	< .01	< .01 D	< .01
Dicamba	< .01 rr	< .01	< .01 D	< .01 rr
Dichloroprop	< .01	< .01	< .01 D	< .01
Dinoseb	< .01	< .01	< .01 D	< .01
MCPA	< .2	< .2	< .2 D	< .2
MCPP	< .2	< .2	< .2 D	< .2 rr
Metals				
Aluminum	10600	18400	23600 D	9720

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. El Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB001	SM25CSB001-DUP	SM25CSB002
Depth (feet):	5.5	6	1
Sample Date:	02/09/94	02/09/94	02/07/94
Analytes			
Metals			
Antimony	< 5 j	< 5 Dj	< 5 j
Arsenic	6.13 j	7.4 j	4.13 j
Barium	62.4	106	79.9
Beryllium	< .5	< .5 D	< .5
Boron	8.9	6.88	12.8
Cadmium	< .5	< .5 D	< .5
Calcium	1390	2090	13300
Chromium	12.7	18.4	14.6
Cobalt	5.43	11.5	7.32
Copper	10.3	13.5	22.6
Cyanide	< .25	< .25 D	< .25
Iron	12700	20900	16000
Lead	8.9	23.3	546
Magnesium	1970	2950	6520
Manganese	509	946	253
Mercury	< .1	< .1	.274
Nickel	11.6	17.2	17.3
Potassium	913	1470	1260
Selenium	< .25 rr	< .25 rr	< .25 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CS8001 2 02/09/94	SM25CS8001 5.5 02/09/94	SM25CS8001-DUP 6 02/09/94	SM25CS8002 1 02/07/94
<b>Analytes</b>				
<b>Metals</b>				
Silver	< .5	< .5	< .5	< .5
Sodium	243	270	360	466
Thallium	< 10	< 10	17.4	< 10
Vanadium	24.3	39.3	47.2	26.6
Zinc	37	65.1	79.5	213
<b>Landfill Parameters</b>				
Ammonia	48.4	52.9	33.9	166
Chloride	< 5	< 5	< 5	< 5
Fluoride	3.86	3.87	6.47	3.89
Nitrite, Nitrate -- Non-Specific	.904	1.44	2.05	.378
Sulfate	< 25	< 25	< 25	96.7
Total Organic Carbon	3900	3700	4900	20000
Total recoverable phenolics	< 1	< 1	< 1	1.45
pH	7.6	7.5	7.5	7.6

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CS8002 4.5 02/07/94	SM25CS8003 11.5 02/08/94	SM25CS8003 5.5 02/08/94	SM25CS8004 13 02/09/94
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	.019 Bb	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB002 4.5 02/07/94	SM25CSB003 11.5 02/08/94	SM25CSB003 5.5 02/08/94	SM25CSB004 13 02/09/94
Analytes				
-----				
Volatile Organic Compounds				
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01 j
Methylene chloride	< .01	< .01	< .01	< .01 j
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01 j
Methylisobutyl ketone	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01
Trichlorofluoromethane	NA	NA	NA	.0086 S
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB002 4.5 02/07/94	SM25CSB003 11.5 02/08/94	SM25CSB003 5.5 02/08/94	SM25CSB004 13 02/09/94
Analytes				
Semivolatile Organic Compounds				
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67 j	< .67 j	< .67 j
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67	< .67	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB002 4.5 02/07/94	SM25CSB003 11.5 02/08/94	SM25CSB003 5.5 02/08/94	SM25CSB004 13 02/09/94
Analytes				
Semivolatiles Organic Compounds				
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14
Benzo [A] anthracene	< .14	< .14	< .14	< .14
Benzo [B] fluoranthene	< .14	< .14	< .14	< .14
Benzo [G,H,I] perylene	< .16	< .16	< .16	< .16
Benzo [K] fluoranthene	< .14	< .14 j	< .14 j	< .14
Benzo [a] pyrene	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	.88 Bb	.65 Bb	.49 Bb
Butylbenzylphthalate	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. E1 Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB002 4.5 02/07/94	SM25CSB003 11.5 02/08/94	SM25CSB003 5.5 02/08/94	SM25CSB004 13 02/09/94
Analytes				
Semivolatile Organic Compounds				
Chrysene	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	.67 b	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14
Dodecane	.44 S	NA	NA	NA
Eicosane	.33 S	NA	NA	NA
Fluoranthene	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14
Heneicosane	.33 S	NA	NA	NA
Heptacosane	NA	NA	NA	NA
Heptadecane	.56 S	NA	NA	NA
Hexachlorobenzene	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14
Hexadecane	.44 S	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25CSB002 4.5 02/07/94	SM25CSB003 11.5 02/08/94	SM25CSB003 5.5 02/08/94	SM25CSB004 13 02/09/94
-----				
Analytes				
Semi-volatile Organic Compounds				
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14
Nonacosane	NA	NA	NA	NA
Nonadecane	.44 S	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14
Tetradecane	.56 S	NA	NA	NA
Tridecane	.44 S	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14 j	< .14 j	< .14 j
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003 j	< .003	< .003	< .013
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003 j	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CS8002	SM25CS8003	SM25CS8003	SM25CS8004
Depth (feet):	4.5	11.5	5.5	13
Sample Date:	02/07/94	02/08/94	02/08/94	02/09/94
Analytes				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003 j	< .003	< .003	< .003
Aldrin	< .003 j	< .003	< .003	< .003
Dieldrin	< .003 j	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003 j	< .003	< .003	< .3
Endrin	< .003 j	< .003	< .003	< .022
Endrin aldehyde	< .022 j	< .022	< .022	< .022
Endrin ketone	< .003 j	< .003	< .003	< 10
Heptachlor	< .003 j	< .003	< .003	< .003
Heptachlor epoxide	< .003 j	< .003	< .003	< .003
Lindane	< .003 j	< .003	< .003	< .003
Methoxychlor	< .003 j	< .003	< .003	< .013
PCB 1016	< .013 j	< .013	< .013	< .013
PCB 1221	< .013 j	< .013	< .013	< .2
PCB 1232	< .013 j	< .013	< .013	< .013
PCB 1242	< .013 j	< .013	< .013	< .013
PCB 1248	< .013 j	< .013	< .013	< .013
PCB 1254	< .013 j	< .013	< .013	< .013
PCB 1260	< .013 j	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB002	SM25CSB003	SM25CSB003	SM25CSB004
Depth (feet):	4.5	11.5	5.5	13
Sample Date:	02/07/94	02/08/94	02/08/94	02/09/94
Analytes				
-----				
Pesticides/PCBs				
Toxaphene	< .3 j	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003 j	< .003	< .003	< .003
alpha-Chlordane	< .003 j	< .003	< .003	< .2
alpha-Endosulfan/Endosulfan I	< .003 j	< .003	< .003	< .003
beta-Benzenehexachloride	< .003 j	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003 j	< .003	< .003	< .003
delta-Benzenehexachloride	< .003 j	< .003	< .003	< .003
gamma-Chlordane	< .003 j	< .003	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01
245T	< .01 j	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2
Metals				
Aluminum	7670	7340	15900	3350

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB002	SM25CSB003	SM25CSB003	SM25CSB004
Depth (feet):	4.5	11.5	5.5	13
Sample Date:	02/07/94	02/08/94	02/08/94	02/09/94
Analytes				
-----				
Metals				
Antimony	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	4 j	3.5 j	7.93 j	6.5
Barium	< 39.8	< 39.8	80.5	< 39.8
Beryllium	< .5	< .5	.756	< .5
Boron	16.7	15.3	12.1	15.1
Cadmium	< .5	< .5	< .5	< .5
Calcium	73300	98600	2440	104000
Chromium	12.2	11	23.2	6.26
Cobalt	7	4.16	7.8	2.59
Copper	16.7	15.3	29.3	8.64
Cyanide	< .25	< .25	< .25	1.16 j
Iron	14400	13100	26800	7670
Lead	8.56	< 5	52.4	5.51
Magnesium	24400	32900	3780	47500
Manganese	356	285	305	205
Mercury	< .1	< .1	< .1	< .1
Nickel	18.9	15.3	34.1	9.18
Potassium	1780	1640	2200	810
Selenium	< .25 rr	< .25 rr	< .25 rr	< .25 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C34. E1 Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB002	SM25CSB003	SM25CSB004
Depth (feet):	4.5	11.5	13
Sample Date:	02/07/94	02/08/94	02/09/94
Analytes			
-----			
Metals			
Silver	< .5	< .5	< .5
Sodium	467	415	475
Thallium	< 10	19.5	< 10
Vanadium	15.6	41.5	9.83
Zinc	41.1	159	19.4
Landfill Parameters			
Ammonia	< 6.25 j	15.4 bj	< 6.25 j
Chloride	< 5	< 5	6.94 j
Fluoride	< 2.5 j	< 2.5 j	< 2.5 j
Nitrite, Nitrate -- Non-Specific	.423 bj	.49 b	1.06
Sulfate	102	< 25	98.7 j
Total Organic Carbon	23000 j	44000 j	70000 j
Total recoverable phenolics	< 1	< 1	< 1
pH	8.3 rr	8.4 rr	8.1 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94
Analytes			
-----			
Volatile Organic Compounds			
1,1,1-Trichloroethane	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01
1,2-Dichloroethane			
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01
Acetone			
Benzene	< .01	.027	< .01
Bromodichloromethane	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01
Carbon disulfide			
Carbon tetrachloride	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94
<b>Analytes</b>			
-----			
<b>Volatile Organic Compounds</b>			
Chloroform	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01
Styrene	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01
Toluene	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01
Trichlorofluoromethane	NA	NA	NA
Vinyl chloride	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01
<b>Semivolatiles Organic Compounds</b>			
1,2,4-Trichlorobenzene	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94

Analytes

Semivolatile Organic Compounds

1,3-Dichlorobenzene	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67 j	< .67 j
3-Methyl-4-chlorophenol	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. E1 Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94
<hr/>			
Analytes			
<hr/>			
Semivolatile Organic Compounds			
4-Bromophenylphenyl ether	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14
Benzo[a]pyrene	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.53 Bb	< .14	1.9 Bb
Butylbenzylphthalate	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94

Analytes

Semivolatile Organic Compounds

Chrysene	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14
Dodecane	NA	NA	NA
Eicosane	NA	NA	NA
Fluoranthene	.17	< .14	< .14
Fluorene	< .14	< .14	< .14
Heneicosane	NA	NA	NA
Heptacosane	NA	NA	NA
Heptadecane	NA	NA	NA
Hexachlorobenzene	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14
Hexadecane	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94

Analytes

Semivolatile Organic Compounds

Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14

Nitrobenzene	< .14	< .14	< .14
Nonacosane	NA	NA	NA
Nonadecane	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14

Phenol	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14
Tetradecane	NA	NA	NA
Tridecane	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14

bis (2-Chloroethyl) ether	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 J	< .14 J	< .14 J

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94
Analytes			
-----			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003
Dimethoate	< .033 rr	< .033 rr	< .033 rr
Endosulfan sulfate	< .003	< .003	< .003
Endrin	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003
Lindane	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94

Analytes

Pesticides/PCBs

Toxaphene	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01
245T	< .01	< .01	< .01
245TP	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01

Dicamba

Dichloroprop	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01
MCPA	< .2	< .2	< .2
MCP	< .2	< .2	< .2

Metals

Aluminum	9430	10200	13600
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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C34. E1 Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94

Analytes

Metals

Antimony	< 5	j	< 5	j
Arsenic	6.9		7	12
Barium	< 39.8		64.4	94.2
Beryllium	< .5		< .5	< .5
Boron	18.4		5.97	< 5
Cadmium	< .5		< .5	< .5
Calcium	64400		1520	2970
Chromium	12.6		11.4	17.3
Cobalt	5.86		4.68	9.91
Copper	16.1		14.1	23.5
Cyanide	< .25		< .25	< .25
Iron	14900		15200	24800
Lead	6.21		10.8	19.8
Magnesium	23000		1990	2730
Manganese	368		504	570
Mercury	< .1		< .1	< .1
Nickel	20.7		14.1	22.3
Potassium	1950		761	1030
Selenium	< .25	rr	< .25	rr
				.347

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C34. EI Site SM25c: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25CSB004	SM25CSB005	SM25CSB005
Depth (feet):	4.5	.3	5.3
Sample Date:	02/08/94	02/09/94	02/09/94
-----			
Analytes			
-----			
Metals			
Silver	< .5	< .5	< .5
Sodium	460	398	335
Thallium	13.8	< 10	< 10
Vanadium	23	21.1	29.7
Zinc	48.3	45.7	89.2
-----			
Landfill Parameters			
Ammonia	14.3 b	45.4 j	43.4 j
Chloride	< 5 j	< 5 j	< 5 j
Fluoride	< 2.5 j	4.26 bj	8.76 bj
Nitrite, Nitrate -- Non-Specific	4.87 j	2.92 j	5.03 j
Sulfate	< 25 j	< 25 j	< 25 j
-----			
Total Organic Carbon	43000 j	7100 j	3800 j
Total recoverable phenolics	< 1 j	< 1	< 1
pH	7.9 j	7.5 j	7.8 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25FSB01A	SM25FSB01A	SM25FSB02A	SM25FSB02A	SM25FSB03A
Depth (feet):	2	7.5	2.5	6.5	3
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01	.011 JPb	.026 Bb	< .01	.027 Bb
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25FSB01A	SM25FSB01A	SM25FSB02A	SM25FSB02A	SM25FSB03A
Depth (feet):	2	7.5	2.5	6.5	3
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
<b>Analytes</b>					
-----					
<b>Volatile Organic Compounds</b>					
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
<b>Semivolatiles Organic Compounds</b>					
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25FSB01A 2 02/07/94	SM25FSB01A 7.5 02/07/94	SM25FSB02A 2.5 02/07/94	SM25FSB02A 6.5 02/07/94	SM25FSB03A 3 02/07/94
Analytes					
Semivolatile Organic Compounds					
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< .14	< .14	< .14	< .14	< .14
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25FSB01A	SM25FSB01A	SM25FSB02A	SM25FSB02A	SM25FSB03A
Depth (feet):	2	7.5	2.5	6.5	3
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
-----					
Semivolatiles Organic Compounds					
4-Chloroaniline	< .3	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14	.51
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14	.65
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14	.22
Benzo[a]pyrene	< .14	< .14	< .14	< .14	.44
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14	< .14	< .14
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14	.6

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25FSB01A 2 02/07/94	SM25FSB01A 7.5 02/07/94	SM25FSB02A 2.5 02/07/94	SM25FSB02A 6.5 02/07/94	SM25FSB03A 3 02/07/94
Analytes					
Semivolatile Organic Compounds					
Di-N-butyl phthalate	< .14	< .14	< .14	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14	< .14
Dibenzo[a,h]anthracene	< .16	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Dodecane	NA	.34 S	NA	NA	NA
Eicosane	NA	NA	NA	NA	.35 S
Fluoranthene	< .14	< .14	< .14	< .14	.76
Fluorene	< .14	< .14	< .14	< .14	< .14
Heptadecane	NA	NA	NA	NA	.46 S
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14
Hexadecane	NA	NA	NA	NA	.35 S
Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25FSB01A 2 02/07/94	SM25FSB01A 7.5 02/07/94	SM25FSB02A 2.5 02/07/94	SM25FSB02A 6.5 02/07/94	SM25FSB03A 3 02/07/94
Analytes					
Semivolatiles Organic Compounds					
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14
Nonadecane	NA	NA	NA	NA	.35 S
Pentachlorophenol	< .67	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14	.25
Phenol	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	.59
Tetradecane	NA	NA	NA	NA	.46 S
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14	< .14
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003 rr	< .003 rr	< .003 rr	.00774 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003 rr	< .003 rr	< .003 rr	.0323 Crr
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003 rr	< .003 rr	< .003 rr	.0173 Crr
Aldrin	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Dieldrin	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table C35. E1 Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25FSB01A 2 02/07/94	SM25FSB01A 7.5 02/07/94	SM25FSB02A 2.5 02/07/94	SM25FSB02A 6.5 02/07/94	SM25FSB03A 3 02/07/94
Analytes					
Pesticides/PCBs					
Endrin	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Endrin aldehyde	< .022	< .022 rr	< .022 rr	< .022 rr	< .022 rr
Endrin ketone	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Heptachlor	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Heptachlor epoxide	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Lindane	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
Methoxychlor	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
PCB 1016	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
PCB 1221	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
PCB 1232	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
PCB 1242	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
PCB 1248	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
PCB 1254	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
PCB 1260	< .013	< .013 rr	< .013 rr	< .013 rr	< .013 rr
Toxaphene	< .3	< .3 rr	< .3 rr	< .3 rr	< .3 rr
alpha-Benzenhexachloride	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
alpha-Chlordane	< .003	< .003 rr	< .003 rr	< .003 rr	.00554 Crr
alpha-Endosulfan/Endosulfan I	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
beta-Benzenhexachloride	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25FSB01A	SM25FSB01A	SM25FSB02A	SM25FSB02A	SM25FSB03A
Depth (feet):	2	7.5	2.5	6.5	3
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
-----					
Pesticides/PCBs					
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003 rr	< .003 rr	< .003 rr	< .003 rr
gamma-Chlordane	< .003	< .003 rr	< .003 rr	< .003 rr	.00485 Cj
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01 j	< .01 j	< .01 j	< .01 j	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba					
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCP	< .2	< .2	< .2	< .2	< .2
Metals					
Aluminum	8720	5300	21000	6560	7160
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	5.36 j	6.09 j	5.56 j	5.67 j	4.85 j
Barium	68.2	58.6	148	56.7	69.3
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	14.5	16.9	16.1	14.4	11.1

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25FSB01A	SM25FSB01A	SM25FSB02A	SM25FSB02A	SM25FSB03A
Depth (feet):	2	7.5	2.5	6.5	3
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
Metals					
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	105000	105000	3340	90000	68100
Chromium	12.3	8.46	27.2	10	11
Cobalt	3.8	4.51	38.3	5.33	5.2
Copper	11.2	13.5	32.1	15.6	18.5
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	12300	11300	30900	12200	18500
Lead	< 5	< 5	18.5	6.67	30
Magnesium	26800	47400	4570	32200	21900
Manganese	246	530	1240	289	300
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	13.4	12.4	38.3	16.7	15
Potassium	1120	1240	1730	1440	670
Selenium	< .25	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	447	462	544	478	485
Thallium	< 10	< 10	< 10	< 10	11.5 JP
Vanadium	17.9	18	56.9	16.7	20.8
Zinc	41.3	39.5	89	42.2	107

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM25FSB01A	SM25FSB01A	SM25FSB02A	SM25FSB02A	SM25FSB03A
Depth (feet):	2	7.5	2.5	6.5	3
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
-----					
Landfill Parameters					
Ammonia	12.6 bj	8.33 bj	61.7 j	12.2 bj	37.4 j
Chloride	< 5 j	< 5 j	48.8 j	50.2 j	27.6 j
Fluoride	< 2.5 j	4.25 b	11.9 b	2.97 b	< 2.5 j
Nitrite, Nitrate -- Non-Specific	.283 bj	< .2 j	.368 bj	< .2 j	.784 j
Sulfate	< 25 j	< 25 j	96.7 j	31.8 b	253 j
Total Organic Carbon	21000 j	30000 j	4800 j	46000 j	48000 j
Total recoverable phenolics	< 1	< 1	< 1	< 1	< 1
pH	8.4 rr	8.3 rr	7.7 rr	8.2 rr	9.8 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes

Volatile Organic Compounds	
1,1,1-Trichloroethane	< .01
1,1,2,2-Tetrachloroethane	< .01
1,1,2-Trichloroethane	< .01
1,1-Dichloroethane	< .01
1,1-Dichloroethene	< .01
1,2-Dichloroethane	< .01
1,2-Dichloroethenes (cis & trans)	< .01
1,2-Dichloropropane	< .01
2-Chloroethylvinyl ether	< .01
Acetic acid, vinyl ester	< .01
Acetone	.014 Bb
Benzene	< .01
Bromodichloromethane	< .01
Bromoform	< .01
Bromomethane	< .01
Carbon disulfide	< .01
Carbon tetrachloride	< .01
Chlorobenzene	< .01
Chloroethane	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes	
-----	
Volatile Organic Compounds	
Chloroform	< .01
Chloromethane	< .01
Dibromochloromethane	< .01
Ethylbenzene	< .01
Methyl-N-butyl ketone	< .01
Methylene chloride	< .01
Methylethyl ketone/2-Butanone	< .01
Methylisobutyl ketone	< .01
Styrene	< .01
Tetrachloroethene	< .01
Toluene	< .01
Trichloroethene	< .01
Vinyl chloride	< .01
Xylenes, total combined	< .01
cis-1,3-Dichloropropene	< .01
trans-1,3-Dichloropropene	< .01
Semivolatile Organic Compounds	
1,2,4-Trichlorobenzene	< .14
1,2-Dichlorobenzene	< .14
1,3-Dichlorobenzene	< .14

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. E1 Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
 Depth (feet): 6.5  
 Sample Date: 02/07/94

## Analytes

## Semivolatile Organic Compounds

1,4-Dichlorobenzene < .14  
 2,4,5-Trichlorophenol < .3  
 2,4,6-Trichlorophenol < .3  
 2,4-Dichlorophenol < .14  
 2,4-Dimethylphenol < .14

2,4-Dinitrophenol < 1.4  
 2,4-Dinitrotoluene < .14  
 2,6-Dinitrotoluene < .14  
 2-Chloronaphthalene < .14  
 2-Chlorophenol < .14

2-Methylnaphthalene < .14  
 2-Methylphenol < .14  
 2-Nitroaniline < .67  
 2-Nitrophenol < .14  
 3,3'-Dichlorobenzidine < .67

3-Methyl-4-chlorophenol < .14  
 3-Nitroaniline < .67 j  
 4,6-Dinitro-2-cresol < 1.4  
 4-Bromophenylphenyl ether < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes

Semivolatiles Organic Compounds

4-Chloroaniline < .3  
4-Chlorophenylphenyl ether < .14  
4-Methylphenol < .14  
4-Nitroaniline < .67  
4-Nitrophenol < 1.4

Acenaphthene < .14  
Acenaphthylene < .14  
Anthracene < .14  
Benzo[A]anthracene < .14  
Benzo[B]fluoranthene < .14

Benzo[G,H,I]perylene < .16  
Benzo[K]fluoranthene < .14  
Benzo[a]pyrene < .14  
Benzoic acid < 1.4  
Benzyl alcohol < .14

Bis (2-Ethylhexyl) phthalate 9.1 B  
Butylbenzylphthalate < .14  
Carbazole < .14  
Chrysene < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
 Depth (feet): 6.5  
 Sample Date: 02/07/94

## Analytes

## Semi-volatile Organic Compounds

Di-N-butyl phthalate < .14  
 Di-N-octyl phthalate < .14  
 Dibenzo[A,H]anthracene < .16  
 Dibenzofuran < .14  
 Diethylphthalate < .14

Dimethylphthalate < .14  
 Dodecane NA  
 Eicosane NA  
 Fluoranthene < .14  
 Fluorene < .14

Heptadecane NA  
 Hexachlorobenzene < .14  
 Hexachlorobutadiene < .14  
 Hexachlorocyclopentadiene < 1  
 Hexachloroethane < .14

Hexadecane NA  
 Indeno[1,2,3-C,D]pyrene < .16  
 Isophorone < .14  
 N-Nitrosodi-N-propylamine < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes	
-----	
Semivolatiles Organic Compounds	
N-Nitrosodiphenylamine	< .14
Naphthalene	< .14
Nitrobenzene	< .14
Nonadecane	NA
Pentachlorophenol	< .67
Phenanthrene	< .14
Phenol	< .14
Pyrene	< .14
Tetradecane	NA
bis (2-Chloroethoxy) methane	< .14
bis (2-Chloroethyl) ether	< .14
bis (2-Chloroisopropyl) ether	< .14
Pesticides/PCBs	
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003 rr
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003 rr
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003 rr
Aldrin	< .003 rr
Dieldrin	< .003 rr
Dimethoate	< .033 j
Endosulfan sulfate	< .003 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes	
-----	
Pesticides/PCBs	
Endrin	< .003 rr
Endrin aldehyde	< .022 rr
Endrin ketone	< .003 rr
Heptachlor	< .003 rr
Heptachlor epoxide	< .003 rr
Lindane	< .003 rr
Methoxychlor	< .003 rr
PCB 1016	< .013 rr
PCB 1221	< .013 rr
PCB 1232	< .013 rr
PCB 1242	< .013 rr
PCB 1248	< .013 rr
PCB 1254	< .013 rr
PCB 1260	< .013 rr
Toxaphene	< .3 rr
alpha-Benzenehexachloride	< .003 rr
alpha-Chlordane	< .003 rr
alpha-Endosulfan/Endosulfan I	< .003 rr
beta-Benzenehexachloride	< .003 rr

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes

Pesticides/PCBs

beta-Endosulfan/Endosulfan II	< .003
delta-Benzenhexachloride	< .003 rr
gamma-Chlordane	< .003 rr

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01
245T	< .01
245TP	< .01
Dalapon	< .01

Dicamba

Dichloroprop	< .01
Dinoseb	< .01
MCPA	< .2
MCPB	< .2 rr

Metals

Aluminum	5690
Antimony	< 5 J
Arsenic	1.71 J
Barium	< 39.8
Beryllium	< .5

Boron

12.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. E1 Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FS803A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes

Metals

Cadmium	< .5
Calcium	85300
Chromium	9.44
Cobalt	5.12
Copper	12.5
Cyanide	< .25
Iron	11100
Lead	< 5
Magnesium	26200
Manganese	307
Mercury	< .1
Nickel	13.7
Potassium	1060
Selenium	< .25 rr
Silver	< .5
Sodium	432
Thallium	< 10
Vanadium	13.7
Zinc	38.7

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C35. EI Site SM25f: Historic Military Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM25FSB03A  
Depth (feet): 6.5  
Sample Date: 02/07/94

Analytes

Landfill Parameters

Ammonia	17.2	bj
Chloride	6.36	b
Fluoride	< 2.5	j
Nitrite, Nitrate -- Non-Specific	< .2	
Sulfate	29.5	b
Total Organic Carbon	48000	j
Total recoverable phenolics	< 1	
pH	8.7	rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25HSS001 0 02/06/94	SM25HSS002 0 02/06/94	SM25HSS003 0 02/06/94	SM25HSS004 0 02/06/94	SM25HSS005 0 02/06/94
Analytes					
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< .14	< 1	< .7	< .14	< .14
1,2-Dichlorobenzene	< .14	< 1	< .7	< .14	< .14
1,3-Dichlorobenzene	< .14	< 1	< .7	< .14	< .14
1,4-Dichlorobenzene	< .14	< 1	< .7	< .14	< .14
2,4,5-Trichlorophenol	< .3	< 3	< 2	< .3	< .3
2,4,6-Trichlorophenol	< .3	< 3	< 2	< .3	< .3
2,4-Dichlorophenol	< .14	< 1	< .7	< .14	< .14
2,4-Dimethylphenol	< .14	< 1	< .7	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 10	< 7	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< 1	< .7	< .14	< .14
2,6-Dinitrotoluene	< .14	< 1	< .7	< .14	< .14
2-Chloronaphthalene	< .14	< 1	< .7	< .14	< .14
2-Chlorophenol	< .14	< 1	< .7	< .14	< .14
2-Methylnaphthalene	< .14	< 1	2	< .14	< .14
2-Methylphenol	< .14	< 1	< .7	< .14	< .14
2-Methylpyrene	NA	NA	3	NA	NA
2-Nitroaniline	< .67	< 7	< 3	< .67	< .67
2-Nitrophenol	< .14	< 1	< .7	< .14	< .14
2-Phenylnaphthalene	NA	NA	4	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25HSS001 0 02/06/94	SM25HSS002 0 02/06/94	SM25HSS003 0 02/06/94	SM25HSS004 0 02/06/94	SM25HSS005 0 02/06/94
-----					
Analytes					
-----					
Semivolatile Organic Compounds					
3,3'-Dichlorobenzidine	< .67	< 7	< 3	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< 1	< 7	< .14	< .14
3-Nitroaniline	< .67 j	< 7 j	< 3 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 10	< 7	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< 1	< 7	< .14	< .14
-----					
4-Chloroaniline	< .3	< 3	< 2	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< 1	< 7	< .14	< .14
4-Methylphenol	< .14	< 1	< 7	< .14	< .14
4-Nitroaniline	< .67	< 7	< 3	< .67	< .67
4-Nitrophenol	< 1.4	< 10	< 7	< 1.4	< 1.4
-----					
Acenaphthene	< .14	3	6	< .14	< .14
Acenaphthylene	< .14	< 1	< 7	< .14	< .14
Anthracene	< .14	6	7	< .14	< .14
Benzo [A] anthracene	< .14	10	20	.58	.76
Benzo [B] fluoranthene	< .14	20	20	.73	1.1
-----					
Benzo [G,H,I] perylene	< .16	6	< 10	.33	.52
Benzo [K] fluoranthene	< .14	6	10	.32	.41
Benzo [a] pyrene	< .14	10	20	.58	.76
Benzo [b] fluorene	NA	NA	4 S	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25HSS001	SM25HSS002	SM25HSS003	SM25HSS004	SM25HSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes					
-----					
Semivolatile Organic Compounds					
Benzo[a]pyrene	NA	8 S	10 S	NA	.47 S
Benzoic acid	< 1.4	< 10 J	< 7 J	< 1.4 J	< 1.4 J
Benzyl alcohol	< .14	< 1	< .7	< .14	< .14
Bis (2-Ethylhexyl) phthalate	1.8 Bb	10 B	< .7	< .14	< .14
Butylbenzylphthalate	< .14	< 1	< .7	< .14	< .14
Carbazole	< .14	3	5	< .14	< .14
Chrysene	< .14	20	20	.7	.96
Di-N-butyl phthalate	.4	< 1	< .7	< .14	< .14
Di-N-octyl phthalate	< .14	< 1	< .7	< .14	< .14
Dibenzo[a,h]anthracene	< .16	< 2	3	< .16	< .16
Dibenzofuran	< .14	< 1	5	< .14	< .14
Diethylphthalate	< .14	< 1	< .7	< .14	< .14
Dimethylphthalate	< .14	< 1	< .7	< .14	< .14
Fluoranthene	< .14	30	40	1.2	1.6
Fluorene	< .14	3	7	< .14	< .14
Heptacosane	NA	NA	NA	NA	NA
Heptadecane	.49 S	NA	NA	NA	NA
Hexachlorobenzene	< .14	< 1	< .7	< .14	< .14
Hexachlorobutadiene	< .14	< 1	< .7	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25HSS001 0 02/06/94	SM25HSS002 0 02/06/94	SM25HSS003 0 02/06/94	SM25HSS004 0 02/06/94	SM25HSS005 0 02/06/94
Analytes					
Semivolatiles Organic Compounds					
Hexachlorocyclopentadiene	< 1	< 10	< 5	< 1	< 1
Hexachloroethane	< .14	< 1	< .7	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	8	10	.38	.55
Isophorone	< .14	< 1	< .7	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< 1	< .7	< .14	< .14
N-Nitrosodiphenylamine	< .14	< 1	< .7	< .14	< .14
Naphthalene	< .14	< 1	3	< .14	< .14
Nitrobenzene	< .14	< 1	< .7	< .14	< .14
Nonacosane	1.6 S	NA	4 S	NA	NA
Palmitic acid / Hexadecanoic acid	NA	NA	NA	.67 S	NA
Pentachlorophenol	< .67	< 7	< 3	< .67	< .67
Phenanthrene	< .14	30	40	.77	.85
Phenol	< .14	< 1	< .7	< .14	< .14
Pyrene	< .14	30	40	1	1.4
bis (2-Chloroethoxy) methane	< .14	< 1	< .7	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< 1	< .7	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< 1	< .7	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Ctionaste	NA	NA	NA	NA	1.3 S
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.00599 Cj	.102 Cj	< .003 j	< .003 j	.0112 Cj

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25HSS001	SM25HSS002	SM25HSS003	SM25HSS004	SM25HSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes					
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003 rr	< .003 j	< .003 j	< .003 j	< .003 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003 rr	.0128 Cj	< .003	< .003	.0155 Cj
Aldrin	< .003 rr	< .003 j	< .003 j	< .003 j	< .003 j
Dieldrin	< .003 rr	< .003 j	< .003	< .003	< .003 j
Dimethoate	< .033 j	< .033 j	< .033 rr	< .033 j	< .033 j
Endosulfan sulfate					
Endrin	< .003 rr	< .003 j	< .003	< .003	< .003 j
Endrin aldehyde	< .003 rr	< .003 j	< .003	< .003	< .003 j
Endrin ketone	< .022 rr	< .022 j	< .022 j	< .022 j	< .022 j
Heptachlor	< .003 rr	< .003 j	< .003 rr	< .003	< .003 j
	< .003 rr	< .003 j	< .003	< .003	< .003 j
Heptachlor epoxide					
Lindane	< .003 rr	< .003 j	< .003	< .003	< .003 j
Methoxychlor	< .003 rr	< .003 j	< .003	< .003	< .003 j
PCB 1016	< .013 rr	< .013 j	< .013	< .013 j	< .013
PCB 1221	< .013 rr	< .013 j	< .013	< .013	< .013 j
PCB 1232					
PCB 1242	< .013 rr	< .013 j	< .013	< .013	< .013 j
PCB 1248	< .013 rr	< .013 j	< .013	< .013	< .013 j
PCB 1254	< .013 rr	< .013 j	< .013	< .013	< .013 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25HSS001 0 02/06/94	SM25HSS002 0 02/06/94	SM25HSS003 0 02/06/94	SM25HSS004 0 02/06/94	SM25HSS005 0 02/06/94
Analytes					
Pesticides/PCBs					
PCB 1260	< .013 rr	< .013 j	< .013	< .013	< .013 j
Toxaphene	< .3 rr	< .3 j	< .3	< .3	< .3 j
alpha-Benzenhexachloride	< .003 rr	< .003 j	< .003	< .003	< .003 j
alpha-Chlordane	< .003 rr	< .003 j	< .003	< .003	< .003 j
alpha-Endosulfan/Endosulfan I	< .003 rr	< .003 j	< .003	< .003	< .003 j
beta-Benzenhexachloride	< .003 rr	< .003 j	< .003	< .003	< .003 j
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003 rr	< .003 j	< .003	< .003	< .003 j
gamma-Chlordane	< .003 rr	.00711 cbj	< .003	< .003	< .003 j
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01 rr	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2 rr	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:  
Depth (feet):  
Sample Date:

SM25HSS001 SM25HSS002 SM25HSS003 SM25HSS004 SM25HSS005  
0 0 0 0 0  
02/06/94 02/06/94 02/06/94 02/06/94 02/06/94

## Analytes

## Metals

Aluminum	13600	8500	5840	8990	15300
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	6.8 j	4.79 j	4.65 j	4.66 j	8.37 j
Barium	68	72.6	< 39.8	91.5	126
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	22.7	20.1	8.23	21.6	25.3
Cadmium	.874	< .5	< .5	< .5	< .5
Calcium	11800	15300	3590	11000	34800
Chromium	17.8	18.5	8.37	12.8	22.1
Cobalt	8.58	6.03	6.11	7.65	9.32
Copper	25.9	18.5	8.76	20	37.9
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	21000	13000	10100	14600	26900
Lead	87.4	75.7	41.2	53.2	96.4
Magnesium	5660	4480	1860	3660	13600
Manganese	922	464	478	333	537
Mercury	< .1	< .1	< .1	< .1	.314
Nickel	24.3	11.9	8.23	15.5	26.9
Potassium	1540	989	598	1250	2210

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25HSS001	SM25HSS002	SM25HSS003	SM25HSS004	SM25HSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes					
Metals					
Selenium	.437 rr	< .25 rr	< .25 rr	< .25 rr	< .25 rr
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	566	634	385	549	585
Thallium	< 10	< 10	< 10	< 10	< 10
Vanadium	30.7	21.6	15.9	21.6	36.3
Zinc	178	111	45.2	133	237
Landfill Parameters					
Ammonia	325	326	295	316	199
Chloride	31.7	< 5	< 5	< 5	9.24
Fluoride	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j
Nitrite, Nitrate -- Non-Specific	2.88	10.3	3.27	3.33	3.97
Sulfate	160	< 25	< 25	94.2	< 25
Total Organic Carbon	37000 j	51000 j	20000 j	53000 j	51000 j
Total recoverable phenolics	1.96 b	5.08	2.6	3.59	< 1
pH	8 rr	8 rr	7.8 rr	7.6 rr	7.8 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Semivolatle Organic Compounds

1,2,4-Trichlorobenzene < .14  
1,2-Dichlorobenzene < .14  
1,3-Dichlorobenzene < .14  
1,4-Dichlorobenzene < .14  
2,4,5-Trichlorophenol < .3

2,4,6-Trichlorophenol < .3  
2,4-Dichlorophenol < .14  
2,4-Dimethylphenol < .14  
2,4-Dinitrophenol < 1.4  
2,4-Dinitrotoluene < .14

2,6-Dinitrotoluene < .14  
2-Chloronaphthalene < .14  
2-Chlorophenol < .14  
2-Methylnaphthalene < .14  
2-Methylphenol < .14

2-Methylpyrene NA  
2-Nitroaniline < .67  
2-Nitrophenol < .14  
2-Phenylnaphthalene NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25H: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Semivolatile Organic Compounds

3,3'-Dichlorobenzidine	< .67
3-Methyl-4-chlorophenol	< .14
3-Nitroaniline	< .67 j
4,6-Dinitro-2-cresol	< 1.4
4-Bromophenylphenyl ether	< .14
4-Chloroaniline	< .3
4-Chlorophenylphenyl ether	< .14
4-Methylphenol	< .14
4-Nitroaniline	< .67
4-Nitrophenol	< 1.4
Acenaphthene	< .14
Acenaphthylene	< .14
Anthracene	< .14
Benzo[A]anthracene	< .14
Benzo[B]fluoranthene	.25
Benzo[G,H,I]perylene	< .16
Benzo[K]fluoranthene	< .14
Benzo[a]pyrene	< .14
Benzo[b]fluorene	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C36. E1 Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Semivolatile Organic Compounds

Benzo[ <i>a</i> ]pyrene	NA
Benzoic acid	< 1.4 j
Benzyl alcohol	< .14
Bis (2-Ethylhexyl) phthalate	< .14
Butylbenzylphthalate	< .14

Carbazole	< .14
Chrysene	< .14
Di-N-butyl phthalate	< .14
Di-N-octyl phthalate	< .14
Dibenzo[ <i>A,H</i> ]anthracene	< .16

Dibenzofuran	< .14
Diethylphthalate	< .14
Dimethylphthalate	< .14
Fluoranthene	.4
Fluorene	< .14

Heptacosane	1.5 S
Heptadecane	NA
Hexachlorobenzene	< .14
Hexachlorobutadiene	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Semivolatiles Organic Compounds

Hexachlorocyclopentadiene < 1  
Hexachloroethane < .14  
Indeno[1,2,3-C,D]pyrene < .16  
Isophorone < .14  
N-Nitrosodi-N-propylamine < .14

N-Nitrosodiphenylamine

Naphthalene < .14  
Nitrobenzene < .14  
Nonacosane NA

Palmitic acid / Hexadecanoic acid

.5 S

Pentachlorophenol

Phenanthrene < .67

Phenol < .14

Pyrene < .14

bis (2-Chloroethoxy) methane .35

bis (2-Chloroethyl) ether < .14

bis (2-Chloroisopropyl) ether < .14

r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Ctionaste 1.7 S

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .003 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1-dichloroethane  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene  
Aldrin  
Dieldrin  
Dimethoate

< .003 j  
< .003  
< .003 j  
< .003  
< .033 j

Endosulfan sulfate  
Endrin  
Endrin aldehyde  
Endrin ketone  
Heptachlor

< .003  
< .003  
< .022 j  
< .003  
< .003

Heptachlor epoxide  
Lindane  
Methoxychlor  
PCB 1016  
PCB 1221

< .003  
< .003  
< .003 j  
< .013  
< .013

PCB 1232  
PCB 1242  
PCB 1248  
PCB 1254

< .013  
< .013  
< .013  
< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes	
-----	
Pesticides/PCBs	
PCB 1260	< .013
Toxaphene	< .3
alpha-Benzenehexachloride	< .003
alpha-Chlordane	< .003
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenehexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenehexachloride	< .003
gamma-Chlordane	< .003
Herbicides	
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01
245T	< .01
245TP	< .01
Dalepon	< .01
Dicamba	< .01
Dichloroprop	< .01
Dinoseb	< .01
MCPA	< .2
MCPP	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Metals

Aluminum	6520
Antimony	< 5 j
Arsenic	4.18 j
Barium	75.3
Beryllium	< .5
Boron	13.5
Cadmium	< .5
Calcium	8190
Chromium	10.7
Cobalt	5.18
Copper	16.7
Cyanide	< .25
Iron	11700
Lead	76.9
Magnesium	3010
Manganese	385
Mercury	.226
Nickel	12.4
Potassium	819

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C36. EI Site SM25h: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25HSS006  
Depth (feet): 0  
Sample Date: 02/06/94

Analytes

Metals

Selenium	< .25	rr
Silver	< .5	
Sodium	435	
Thallium	< 10	
Vanadium	15.9	
Zinc	109	

Landfill Parameters

Ammonia	366	
Chloride	< 5	
Fluoride	< 2.5	j
Nitrite, Nitrate -- Non-Specific	3.49	
Sulfate	< 25	
Total Organic Carbon	62000	j
Total recoverable phenolics	6.79	
pH	7.8	rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25ISS001	SM25ISS002	SM25ISS003	SM25ISS004	SM25ISS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94

Analytes

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25ISS001	SM25ISS002	SM25ISS003	SM25ISS004	SM25ISS005
	0	0	0	0	0
	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
Semivolatiles Organic Compounds					
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	.64	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[A]anthracene	.31	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	.72	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	1.3	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	.29	< .14	< .14	< .14	< .14
Benzo[a]pyrene	.72	< .14	< .14	< .14	< .14
Benzo[e]pyrene	.57 S	NA	NA	NA	NA
Benzoic acid	< 1.4 j	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C37. E1 Site SM251: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM251SS001 0 02/07/94	SM251SS002 0 02/07/94	SM251SS003 0 02/07/94	SM251SS004 0 02/07/94	SM251SS005 0 02/07/94
Analytes					
Semivolatile Organic Compounds					
Bis (2-Ethylhexyl) phthalate	3.2 Bb	.36 Bb	.62 Bb	< .14	.27 Bb
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14
Chrysene	.46	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	.29 b	.47 b	.27 b	< .14	.5 b
Di-N-octyl phthalate	< .14	< .14	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Fluoranthene	.43	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	.69	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25ISS001	SM25ISS002	SM25ISS003	SM25ISS004	SM25ISS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
Semivolatile Organic Compounds					
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14
Nonacosane	.46 S	.99 S	.45 S	.66 S	.83 S
Pentachlorophenol	< .67	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14	< .14
Pyrene	.98	< .14	< .14	< .14	< .14
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Ctionaste	.92 S	NA	NA	NA	NA
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.0721 Crr	.0261 Cj	.0168 Cj	.0279 Cj	.00698 Cj
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	.0755 Cj	.0161 Crr	< .003 j	< .003 j	< .003 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.0755 Cj	.062 C	.0437 C	.0745 C	.00814 C
Aldrin	< .003 j	< .003 j	< .003 j	< .003 j	< .003 j
Dieldrin	< .003	< .003	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM251SS001 0 02/07/94	SM251SS002 0 02/07/94	SM251SS003 0 02/07/94	SM251SS004 0 02/07/94	SM251SS005 0 02/07/94
Analytes					
Pesticides/PCBs					
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022 j	< .022 j	< .022 j	< .022 j	< .022 j
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003
Methoxychlor	< .003 j	< .003 j	< .003 j	< .003 j	< .003 j
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25ISS001 0 02/07/94	SM25ISS002 0 02/07/94	SM25ISS003 0 02/07/94	SM25ISS004 0 02/07/94	SM25ISS005 0 02/07/94
Analytes					
Pesticides/PCBs					
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01 rr	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2 rr	< .2	< .2
Metals					
Aluminum	3320	3850	3700	7450	9800
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	3.32 j	4.22 j	4.82 j	4.79 j	4.65 j
Barium	< 39.8	< 39.8	< 39.8	66.5	68.1
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	13.7	14.9	15.7	< 5	< 5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25ISS001	SM25ISS002	SM25ISS003	SM25ISS004	SM25ISS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
Metals					
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	96100	103000	104000	1600	2160
Chromium	5.61	6.45	6.39	10.1	12.6
Cobalt	2.75	3.47	3.7	7.71	9.14
Copper	11.1	11	12.3	8.11	11.8
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	8010	8680	11000	11700	14500
Lead	24	18.6	13.5	34.6	26.6
Magnesium	36600	60800	35900	1600	2330
Manganese	366	409	359	678	731
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	9.73	10.7	15.7	9.31	12.1
Potassium	618	620	661	598	1130
Selenium	< .25	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	435	496	437	399	482
Thallium	< 10	< 10	< 10	< 10	< 10
Vanadium	9.73	10.3	12.3	19.9	23.3
Zinc	36.6	40.9	78.5	41.2	51.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25ISS001	SM25ISS002	SM25ISS003	SM25ISS004	SM25ISS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94	02/07/94
Analytes					
-----					
Landfill Parameters					
Ammonia	86 j	234 j	184 j	205 j	320 j
Chloride	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Fluoride	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j
Nitrite, Nitrate -- Non-Specific	6.74 j	6.03 j	3.15 j	3.28 j	3.42 j
Sulfate	< 25 j	< 25 j	< 25 j	< 25 j	< 25 j
Total Organic Carbon	58000 j	56000 j	50000 j	28000 j	34000 j
Total recoverable phenolics	4.27	2.89 b	1.14 b	1.53 b	1.69 b
pH	8 rr	7.8 rr	8.1 rr	6.2 rr	6.6 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25ISS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Semivolatiles Organic Compounds

1,2,4-Trichlorobenzene	< .14
1,2-Dichlorobenzene	< .14
1,3-Dichlorobenzene	< .14
1,4-Dichlorobenzene	< .14
2,4,5-Trichlorophenol	< .3
2,4,6-Trichlorophenol	< .3
2,4-Dichlorophenol	< .14
2,4-Dimethylphenol	< .14
2,4-Dinitrophenol	< 1.4
2,4-Dinitrotoluene	< .14
2,6-Dinitrotoluene	< .14
2-Chloronaphthalene	< .14
2-Chlorophenol	< .14
2-Methylnaphthalene	< .14
2-Methylphenol	< .14
2-Nitroaniline	< .67
2-Nitrophenol	< .14
3,3'-Dichlorobenzidine	< .67
3-Methyl-4-chlorophenol	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25ISS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Semivolatiles Organic Compounds

3-Nitroaniline	< .67 j
4,6-Dinitro-2-cresol	< 1.4
4-Bromophenylphenyl ether	< .14
4-Chloroaniline	< .3
4-Chlorophenylphenyl ether	< .14
4-Methylphenol	< .14
4-Nitroaniline	< .67
4-Nitrophenol	< 1.4
Acenaphthene	< .14
Acenaphthylene	< .14
Anthracene	< .14
Benzo [A] anthracene	< .14
Benzo [B] fluoranthene	< .14
Benzo [G,H,I] perylene	< .16
Benzo [K] fluoranthene	< .14
Benzo [a] pyrene	< .14
Benzo [e] pyrene	NA
Benzoic acid	< 1.4
Benzyl alcohol	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C37. E1 Site SM251: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM251SS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Semivolatile Organic Compounds

Bis (2-Ethylhexyl) phthalate	< .14
Butylbenzylphthalate	< .14
Carbazole	< .14
Chrysene	< .14
Di-N-butyl phthalate	.2 JPb
Di-N-octyl phthalate	< .14
Dibenzofuran	< .16
Diethylphthalate	< .14
Dimethylphthalate	< .14
Fluoranthene	< .14
Fluorene	< .14
Hexachlorobenzene	< .14
Hexachlorobutadiene	< .14
Hexachlorocyclopentadiene	< 1
Hexachloroethane	< .14
Indeno[1,2,3-C,D]pyrene	< .16
Isophorone	< .14
N-Nitrosodi-N-propylamine	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25ISS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Semivolatiles Organic Compounds

N-Nitrosodiphenylamine < .14  
Naphthalene < .14  
Nitrobenzene < .14  
Nonacosane 1.4 S  
Pentachlorophenol < .67

Phenanthrene < .14  
Phenol < .14  
Pyrene < .14  
bis (2-Chloroethoxy) methane < .14  
bis (2-Chloroethyl) ether < .14

bis (2-Chloroisopropyl) ether < .14  
r-Sitosterol / (3 $\beta$ ,24 $\delta$ )-Stigmast-5-en-3-ol/Clonaste NA

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane .00478 CJ  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane .00829 Crr  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene .00829 C  
Aldrin < .003 j  
Dieldrin < .003  
Dimethoate < .033 j  
Endosulfan sulfate < .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM251: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM251SS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Pesticides/PCBs

Endrin < .003  
Endrin aldehyde < .022 J  
Endrin ketone < .003  
Heptachlor < .003  
Heptachlor epoxide < .003

Lindane

Methoxychlor < .003  
PCB 1016 < .013  
PCB 1221 < .013  
PCB 1232 < .013

PCB 1242

PCB 1248 < .013  
PCB 1254 < .013  
PCB 1260 < .013  
Toxaphene < .3

alpha-Benzenehexachloride

alpha-Chlordane < .003  
alpha-Endosulfan/Endosulfan I < .003  
beta-Benzenehexachloride < .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25ISS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Pesticides/PCBs  
beta-Endosulfan/Endosulfan II < .003  
delta-Benzenehexachloride < .003  
gamma-Chlordane < .003

Herbicides  
2,4-D / 2,4-Dichlorophenoxyacetic acid < .01  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01  
245T < .01  
245TP < .01  
Dalapon < .01

Dicamba < .01  
Dichloroprop < .01  
Dinoseb < .01  
MCPA < .2  
MCPP < .2

Metals  
Aluminum 9830  
Antimony < 5 J  
Arsenic 4.78 J  
Barium 61.8  
Beryllium < .5  
Boron 11.1

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM251: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM251SS006  
Depth (feet): 0  
Sample Date: 02/07/94

## Analytes

## Metals

Cadmium	< .5
Calcium	9270
Chromium	13.2
Cobalt	8.01
Copper	16.9
Cyanide	< .25
Iron	15400
Lead	25.3
Magnesium	5900
Manganese	492
Mercury	< .1
Nickel	15.4
Potassium	1170
Selenium	< .25 rr/J
Silver	< .5
Sodium	435
Thallium	< 10
Vanadium	23.9
Zinc	59

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table C37. EI Site SM25i: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25ISS006  
Depth (feet): 0  
Sample Date: 02/07/94

Analytes

Landfill Parameters

Ammonia	201
Chloride	7.12 bj
Fluoride	< 2.5 j
Nitrite, Nitrate -- Non-Specific	4.47 j
Sulfate	< 25 j
Total Organic Carbon	32000 j
Total recoverable phenolics	2.96 b
pH	7.4 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25J: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS001 0 02/07/94	SM25JSS001-DUP 0 02/07/94	SM25JSS002 0 02/07/94	SM25JSS003 0 02/07/94
Analytes				
Semivolatiles Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14 D	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14 D	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14 D	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14 D	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3 D	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3 D	< .3	< .3
2,4-Dichlorophenol	< .14	< .14 D	< .14	< .14
2,4-Dimethylphenol	< .14	< .14 D	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4 D	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14 D	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14 D	< .14	< .14
2-Chloronaphthalene	< .14	< .14 D	< .14	< .14
2-Chlorophenol	< .14	< .14 D	< .14	< .14
2-Methylnaphthalene	< .14	< .14 D	< .14	< .14
2-Methylphenol	< .14	< .14 D	< .14	< .14
2-Nitroaniline	< .67	< .67 D	< .67	< .67
2-Nitrophenol	< .14	< .14 D	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67 D	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS001 0 02/07/94	SM25JSS001-DUP 0 02/07/94	SM25JSS002 0 02/07/94	SM25JSS003 0 02/07/94
Analytes				
Semivolatile Organic Compounds				
3-Nitroaniline	< .67 j	< .67 Dj	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4 D	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14 D	< .14	< .14
4-Chloroaniline	< .3	< .3 D	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14 D	< .14	< .14
4-Methylphenol	< .14	< .14 D	< .14	< .14
4-Nitroaniline	< .67	< .67 D	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4 D	< 1.4	< 1.4
Acenaphthene	< .14	< .14 D	< .14	< .14
Acenaphthylene	< .14	< .14 D	< .14	< .14
Anthracene	< .14	< .14 D	< .14	< .14
Benzo[A]anthracene	< .14	< .14 D	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14 D	< .14	.2
Benzo[G,H,I]perylene	< .16	< .16 D	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14 D	< .14	< .14
Benzo[a]pyrene	< .14	< .14 D	< .14	< .14
Benzoic acid	< 1.4 j	< 1.4 D	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14 D	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.29 Bb	.81 DBb	.38 Bb	.39 Bb

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C38. EI Site SM25J: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS001 0 02/07/94	SM25JSS001-DUP 0 02/07/94	SM25JSS002 0 02/07/94	SM25JSS003 0 02/07/94
Analytes				
Semivolatiles Organic Compounds				
Butylbenzylphthalate	< .14	< .14 D	< .14	< .14
Carbazole	< .14	< .14 D	< .14	< .14
Chrysene	< .14	< .14 D	< .14	< .14
Di-N-butyl phthalate	.35 b	.22 DBb	.28 b	< .14
Di-N-octyl phthalate	< .14	< .14 D	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16 D	< .16	< .16
Dibenzofuran	< .14	< .14 D	< .14	< .14
Diethylphthalate	< .14	< .14 D	< .14	< .14
Dimethylphthalate	< .14	< .14 D	< .14	< .14
Fluoranthene	< .14	< .14 D	< .14	.24
Fluorene	< .14	< .14 D	< .14	< .14
Heptacosane	NA	NA	NA	NA
Hexachlorobenzene	< .14	< .14 D	< .14	< .14
Hexachlorobutadiene	< .14	< .14 D	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1 D	< 1	< 1
Hexachloroethane	< .14	< .14 D	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16 D	< .16	< .16
Isophorone	< .14	< .14 D	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS001 0 02/07/94	SM25JSS001-DUP 0 02/07/94	SM25JSS002 0 02/07/94	SM25JSS003 0 02/07/94
Analytes				
Semivolatiles Organic Compounds				
N-Nitrosodiphenylamine	< .14	< .14 D	< .14	< .14
Naphthalene	< .14	< .14 D	< .14	< .14
Nitrobenzene	< .14	< .14 D	< .14	< .14
Nonacosane	NA	.41 S	1.4 S	NA
Palmitic acid / Hexadecanoic acid	NA	NA	NA	.4 S
Pentachlorophenol	< .67	< .67 D	< .67	< .67
Phenanthrene	< .14	< .14 D	< .14	< .14
Phenol	< .14	< .14 D	< .14	< .14
Pyrene	< .14	< .14 D	< .14	.24
bis (2-Chloroethoxy) methane	< .14	< .14 D	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14 D	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14 D	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Ctionaste	.79 S	NA	NA	NA
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003 D	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003 D	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003 D	< .003	< .003
Aldrin	< .003 j	< .003 Dj	< .003 j	< .003 j
Dieldrin	< .003	< .003 D	< .003	< .003
Dimethoate	< .033 j	< .033 Dj	< .033 j	< .033 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS001	SM25JSS001-DUP	SM25JSS002	SM25JSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94
Analytes				
-----				
Pesticides/PCBs				
Endosulfan sulfate	< .003	< .003 D	< .003	< .003
Endrin	< .003	< .003 D	< .003	< .003
Endrin aldehyde	< .022	< .022 D	< .022	< .022
Endrin ketone	< .003	< .003 D	< .003	< .003
Heptachlor	< .003	< .003 D	< .003	< .003
Heptachlor epoxide	< .003	< .003 D	< .003	< .003
Lindane	< .003	< .003 D	< .003	< .003
Methoxychlor	< .003	< .003 D	< .003	< .003
PCB 1016	< .013	< .013 D	< .013	< .013
PCB 1221	< .013	< .013 D	< .013	< .013
PCB 1232	< .013	< .013 D	< .013	< .013
PCB 1242	< .013	< .013 D	< .013	< .013
PCB 1248	< .013	< .013 D	< .013	< .013
PCB 1254	< .013	< .013 D	< .013	< .013
PCB 1260	< .013 /1	< .013 D/1	< .013 /1	< .013 /1
Toxaphene	< .3	< .3 D	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003 D	< .003	< .003
alpha-Chlordane	< .003	< .003 D	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003 D	< .003	< .003

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS001	SM25JSS001-DUP	SM25JSS002	SM25JSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94

-----  
Analytes

Pesticides/PCBs

beta-Benzenhexachloride	< .003	< .003 D	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003 D	< .003	< .003
delta-Benzenhexachloride	< .003	< .003 D	< .003	< .003
gamma-Chlordane	< .003	< .003 D	< .003	< .003

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01 D	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01 D	< .01	< .01
245T	< .01	< .01 D	< .01	< .01
245TP	< .01	< .01 D	< .01	< .01
Dalepon	< .01	< .01 D	< .01	< .01

Dicamba

Dichloroprop	< .01	< .01 D	< .01	< .01
Dinoseb	< .01	< .01 D	< .01	< .01
MCPA	< .2	< .2 D	< .2	< .2
MCPp	< .2 rr	< .2 D	< .2	< .2

Metals

Aluminum	8770	9580 D	9780	9590
Antimony	< 5 j	< 5 Dj	< 5 j	< 5 j
Arsenic	4.45 j	6.43 Dj	5.87 j	5.73 j
Barium	68.1	68.4 D	76.8	77.2
Beryllium	< .5	< .5 D	< .5	< .5

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. E1 Site SM25J: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS001 0 02/07/94	SM25JSS001-DUP 0 02/07/94	SM25JSS002 0 02/07/94	SM25JSS003 0 02/07/94
Analytes				
Metals				
Boron	9.03	11.1 D	11.9	9.05
Cadmium	< .5	< .5 D	< .5	< .5
Calcium	3530	3420 D	3630	3060
Chromium	12.8	13.7 D	14	14.6
Cobalt	8.25	7.11 D	6.98	13.3
Copper	15.7	16.4 D	16.8	17.3
Cyanide	< .25	< .25 D	< .25	< .25
Iron	14400	15000 D	16800	17300
Lead	32.7	28.7 D	30.7	32
Magnesium	2360	2460 D	2510	2530
Manganese	432	397 D	377	759
Mercury	< .1	< .1 D	< .1	< .1
Nickel	12.8	13.7 D	15.4	17.3
Potassium	1190	1310 D	1230	1030
Selenium	< .25 rr/J	< .25 Drr/J	< .25 rr/J	.36 rr/J
Silver	< .5	< .5 D	< .5	< .5
Sodium	393	465 D	433	399
Thallium	< 10	< 10 D	< 10	< 10
Vanadium	20.9	21.9 D	23.7	25.3

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS001	SM25JSS001-DUP	SM25JSS002	SM25JSS003
Depth (feet):	0	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94	02/07/94
-----				
Analytes				
-----				
Metals				
Zinc	60.2	62.9 D	61.5	58.6
-----				
Landfill Parameters				
Ammonia	295 J	272 D	288	265
Chloride	< 5 J	< 5 DJ	< 5 J	< 5 J
Fluoride	< 2.5 J	< 2.5 DJ	< 2.5 J	< 2.5 J
Nitrite, Nitrate -- Non-Specific	8.55 J	13.1 D	10.9	12.7
Sulfate	< 25 J	< 25 DJ	< 25 J	< 25 J
-----				
Total Organic Carbon	32000 J	30000 DJ	31000 J	32000 J
Total recoverable phenolics	4.32	1.94 Db	4.46 b	8.02
pH	7.2 rr	7.3 Drr	6.9 rr	6.9 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS004	SM25JSS005	SM25JSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
<b>Analytes</b>			
-----			
<b>Semivolatile Organic Compounds</b>			
1,2,4-Trichlorobenzene	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data qualifiers are defined in Table C1

Table C38. E1 Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS004	SM25JSS005	SM25JSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
<b>Analytes</b>			
-----			
Semivolatile Organic Compounds			
3-Nitroaniline	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14
Anthracene	.59	< .14	< .14
Benzo[A]anthracene	2.2	.25	.26
Benzo[B]fluoranthene	2.8	.36	.38
Benzo[G,H,I]perylene	< 1.4	< .16	.21
Benzo[K]fluoranthene	1.2	< .14	< .14
Benzo[a]pyrene	2.2	.26	.28
Benzoic acid	< 1.4 j	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.26 Bb	.4 Bb	.49 Bb

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS004 0 02/07/94	SM25JSS005 0 02/07/94	SM25JSS006 0 02/07/94
Analytes			
Semivolatiles Organic Compounds			
Butylbenzylphthalate	< .14	< .14	< .14
Carbazole	.24	< .14	< .14
Chrysene	2.7	.35	.34
Di-N-butyl phthalate	< .14	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14
Dibenzo[A,H]anthracene	.4	< .16	< .16
Dibenzofuran	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14
Fluoranthene	4.6	.49	.55
Fluorene	.22	< .14	< .14
Heptacosane	NA	.37 S	NA
Hexachlorobenzene	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	1.6	.19 JP	.23
Isophorone	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25J: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS004 0 02/07/94	SM25JSS005 0 02/07/94	SM25JSS006 0 02/07/94
Analytes			
Semivolatiles Organic Compounds			
N-Nitrosodiphenylamine	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14
Nonacosane	NA	.5 S	.5 S
Palmitic acid / Hexadecanoic acid	.81 S	NA	NA
Pentachlorophenol	< .67	< .67	< .67
Phenanthrene	2.7	.31	.28
Phenol	< .14	< .14	< .14
Pyrene	3.9	.45	.48
bis (2-Chloroethoxy) methane	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clonaste	NA	NA	NA
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.27 C	.0175 C	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	.13 C	.0162 C	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.27 C	.0175 C	< .003
Aldrin	< .003 j	< .003 j	< .003 j
Dieldrin	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 j	< .033 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS004 0 02/07/94	SM25JSS005 0 02/07/94	SM25JSS006 0 02/07/94
Analytes			
Pesticides/PCBs			
Endosulfan sulfate	< .003	< .003	< .003
Endrin	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003
Lindane	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013
PCB 1260	< .013 /1	< .013 /1	< .013 /1
Toxaphene	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25JSS004 0 02/07/94	SM25JSS005 0 02/07/94	SM25JSS006 0 02/07/94
Analytes			
Pesticides/PCBs			
beta-Benzenhexachloride	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01
245T	< .01	< .01	< .01
245TP	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01
MCPA	< .2	< .2	< .2
MCPP	< .2	< .2	< .2
Metals			
Aluminum	8640	12500	10100
Antimony	< 5 j	< 5 j	< 5 j
Arsenic	7.29 j	8.85 j	7.29 j
Barium	81	91	66.6
Beryllium	< .5	< .5	< .5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25j: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS004	SM25JSS005	SM25JSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
Analytes			
Metals			
Boron	9.04	13.7	8.79
Cadmium	< .5	< .5	< .5
Calcium	7830	13700	3640
Chromium	13.2	17.5	15.1
Cobalt	7.15	9.73	6.28
Copper	54	23.7	31.4
Cyanide	< .25	< .25	< .25
Iron	16200	21200	16300
Lead	97.2	36.2	47.7
Magnesium	4320	7230	2890
Manganese	418	935	389
Mercury	< .1	< .1	< .1
Nickel	14.8	22.4	13.8
Potassium	972	1750	1120
Selenium	.445 rr/J	< .25 rr/J	.452 rr/J
Silver	< .5	< .5	< .5
Sodium	405	387	389
Thallium	< 10	< 10	< 10
Vanadium	22.9	32.4	26.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C38. EI Site SM25J: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25JSS004	SM25JSS005	SM25JSS006
Depth (feet):	0	0	0
Sample Date:	02/07/94	02/07/94	02/07/94
<hr/>			
Analytes			
<hr/>			
Metals			
Zinc	103	76.1	82.9
<hr/>			
Landfill Parameters			
Ammonia	161	227	173
Chloride	8.95 j	< 5 j	< 5 j
Fluoride	4.3 bj	< 2.5 j	< 2.5 j
Nitrite, Nitrate -- Non-Specific	6.11	9.71	10.7
Sulfate	< 25 j	< 25 j	< 25 j
<hr/>			
Total Organic Carbon	31000 j	40000 j	29000 j
Total recoverable phenolics	< 1	< 1	< 1
pH	7.6 rr	7.7 rr	7.7 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25KSS001 0 02/22/94	SM25KSS002 0 02/22/94	SM25KSS003 0 02/22/94	SM25KSS004 0 02/22/94	SM25KSS005 0 02/22/94
Analytes					
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Epoxydicyclohexene	NA	.39 S	NA	NA	NA
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67	< .67 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25KSS001 0 02/22/94	SM25KSS002 0 02/22/94	SM25KSS003 0 02/22/94	SM25KSS004 0 02/22/94	SM25KSS005 0 02/22/94
Analytes					
Semivolatile Organic Compounds					
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67	< .67	< .67	< .67	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67	< .67 j
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14 j	< .14 j	< .14 j	< .14 j	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo [A] anthracene	< .14	< .14	< .14	< .14	< .14
Benzo [B] fluoranthene	< .14	< .14	< .14	< .14	< .14
Benzo [G,H,I] perylene	< .16	< .16	< .16	< .16	< .16 j
Benzo [K] fluoranthene	< .14	< .14	< .14	< .14	< .14
Benzo [a] pyrene	< .14	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C39. EI site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25KSS001 0 02/22/94	SM25KSS002 0 02/22/94	SM25KSS003 0 02/22/94	SM25KSS004 0 02/22/94	SM25KSS005 0 02/22/94
Analytes					
Semivolatiles Organic Compounds					
Bis (2-Ethylhexyl) phthalate	.3	< .14	< .14	.24	< .14
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14 j
Chrysene	< .14	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	< .14	< .14	< .14 j
Di-N-octyl phthalate	< .14 j	< .14 j	< .14 j	< .14 j	< .14 j
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16	< .16 j
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Heptacosane	1.2 S	.78 S	.84 S	.81 S	.54 S
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16	< .16 j
Isophorone	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: Depth (feet): Sample Date:	SM25KSS001 0 02/22/94	SM25KSS002 0 02/22/94	SM25KSS003 0 02/22/94	SM25KSS004 0 02/22/94	SM25KSS005 0 02/22/94
Analytes					
Semivolatiles Organic Compounds					
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14
Nonacosane	3 S	2.6 S	2.8 S	4 S	1.3 S
Pentachlorophenol	< .67	< .67	< .67	< .67	< .67
Pentacosane	.61 S	.39 S	.42 S	.54 S	NA
Phenanthrene	< .14	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clionaste	1.2 S	.65 S	.7 S	.81 S	.67 S
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003 J	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003 J	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003 J	< .003	< .003
Aldrin	< .003	< .003	< .003 J	< .003	< .003
Dieldrin	< .003	< .003	< .003 J	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25KSS001	SM25KSS002	SM25KSS003	SM25KSS004	SM25KSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/22/94	02/22/94	02/22/94	02/22/94	02/22/94
Analytes					
Pesticides/PCBs					
Dimethoate	< .033 rr/l	< .033 rr/l	< .033 rr/l	< .033 rr/l	< .033 rr/l
Endosulfan sulfate	< .003	< .003	< .003 j	< .003	< .003
Endrin	< .003	< .003	< .003 j	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022 j	< .022	< .022
Endrin ketone	< .003	< .003	< .003 j	< .003	< .003
Heptachlor	< .003	< .003	< .003 j	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003 j	< .003	< .003
Lindane	< .003	< .003	< .003 j	< .003	< .003
Methoxychlor	< .003	< .003	< .003 j	< .003	< .003
PCB 1016	< .013	< .013	< .013 j	< .013	< .013
PCB 1221	< .013	< .013	< .013 j	< .013	< .013
PCB 1232	< .013	< .013	< .013 j	< .013	< .013
PCB 1242	< .013	< .013	< .013 j	< .013	< .013
PCB 1248	< .013	< .013	< .013 j	< .013	< .013
PCB 1254	< .013	< .013	< .013 j	< .013	< .013
PCB 1260	< .013	< .013	< .013 j	< .013	< .013
Toxaphene	< .3	< .3	< .3 j	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003 j	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003 j	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25KSS001	SM25KSS002	SM25KSS003	SM25KSS004	SM25KSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/22/94	02/22/94	02/22/94	02/22/94	02/22/94
Analytes					
Pesticides/PCBs					
alpha-Endosulfan/Endosulfan I	< .003	< .003 j	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003 j	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003 j	< .003	< .003
delta-Benzenhexachloride	< .003 j	< .003 j	< .003 j	< .003 j	< .003 j
gamma-Chlordane	< .003	< .003	< .003 j	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	.0228 C	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2 j	< .2 j	< .2 j	< .2 j	< .2 j
MCPP	< .2	< .2	< .2	< .2	< .2
Metals					
Aluminum	18200	14300	13900	13300	12200
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	9.1	7.8	5.6	11	8
Barium	102	85.7	75.8	73.9	72.3

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25KSS001	SM25KSS002	SM25KSS003	SM25KSS004	SM25KSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/22/94	02/22/94	02/22/94	02/22/94	02/22/94
Analytes					
Metals					
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	22.8	15.6	21.1	16.1	48.2
Cadmium	< .5	< .5	< .5	< .5	1.47
Calcium	19800	15600	67400	44400	11000
Chromium	21.3	16.9	16.9	17.5	20.1
Cobalt	8.05	8.31	6.32	7.26	8.7
Copper	22.8	18.2	21.1	30.9	20.1
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	22800	19500	16900	40300	18700
Lead	38	24.7	40.7	44.4	46.9
Magnesium	9880	10000	16900	21500	5490
Manganese	578	610	534	793	616
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	22.8	18.2	18.3	24.2	18.7
Potassium	2130	1690	1970	1610	1470
Selenium	< .25	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	578	468	492	511	576
Thallium	21.3	15.6	19.7	45.7	13.4 JP

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name:	SM25KSS001	SM25KSS002	SM25KSS003	SM25KSS004	SM25KSS005
Depth (feet):	0	0	0	0	0
Sample Date:	02/22/94	02/22/94	02/22/94	02/22/94	02/22/94
Analytes					
Metals					
Vanadium	39.5	32.5	30.9	30.9	29.5
Zinc	319	182	111	134	469
Landfill Parameters					
Ammonia	280	227	324	312	262
Chloride	< 5	< 5	< 5	< 5	< 5
Fluoride	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Nitrite, Nitrate -- Non-Specific	4.33	4.91	13.2	12.7	9.21
Sulfate	< 25	< 25	< 25	< 25	< 25
Total Organic Carbon	43200	32000	45000	34500	47900
Total recoverable phenolics	< 1	< 1	2.18	< 1	< 1
pH	7.5	7.6	7.6	7.6	7.6

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene	< .14
1,2-Dichlorobenzene	< .14
1,2-Epoxydicyclohexene	NA
1,3-Dichlorobenzene	< .14
1,4-Dichlorobenzene	< .14
2,4,5-Trichlorophenol	< .3
2,4,6-Trichlorophenol	< .3
2,4-Dichlorophenol	< .14
2,4-Dimethylphenol	< .14
2,4-Dinitrophenol	< 1.4
2,4-Dinitrotoluene	< .14
2,6-Dinitrotoluene	< .14
2-Chloronaphthalene	< .14
2-Chlorophenol	< .14
2-Methylnaphthalene	< .14
2-Methylphenol	< .14
2-Nitroaniline	< .67
2-Nitrophenol	< .14
3,3'-Dichlorobenzidine	< .67 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Semivolatiles Organic Compounds

3-Methyl-4-chlorophenol	< .14
3-Nitroaniline	< .67 j
4,6-Dinitro-2-cresol	< 1.4
4-Bromophenylphenyl ether	< .14
4-Chloroaniline	< .3 j
4-Chlorophenylphenyl ether	< .14
4-Methylphenol	< .14
4-Nitroaniline	< .67 j
4-Nitrophenol	< 1.4
Acenaphthene	< .14
Acenaphthylene	< .14
Anthracene	< .14
Benzo[A]anthracene	< .14
Benzo[B]fluoranthene	< .14
Benzo[G,H,I]perylene	< .16 j
Benzo[K]fluoranthene	< .14
Benzo[a]pyrene	< .14
Benzoic acid	< 1.4
Benzyl alcohol	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C39. E1 Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Semivolatile Organic Compounds

Bis (2-Ethylhexyl) phthalate	< .14
Butylbenzylphthalate	< .14
Carbazole	< .14 j
Chrysene	< .14
Di-N-butyl phthalate	< .14 j
Di-N-octyl phthalate	< .14 j
Dibenzo[A,H]anthracene	< .16 j
Dibenzofuran	< .14
Diethylphthalate	< .14
Dimethylphthalate	< .14

Fluoranthene	< .14
Fluorene	< .14
Heptacosane	.61 S
Hexachlorobenzene	< .14
Hexachlorobutadiene	< .14

Hexachlorocyclopentadiene	< 1
Hexachloroethane	< .14
Indeno[1,2,3-C,D]pyrene	< .16 j
Isophorone	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Semivolatile Organic Compounds

N-Nitrosodi-N-propylamine < .14  
N-Nitrosodiphenylamine < .14  
Naphthalene < .14  
Nitrobenzene < .14  
Nonacosane 1.5 S

Pentachlorophenol

Pentacosane < .67  
Phenanthrene NA  
Phenol < .14  
Pyrene < .14

bis (2-Chloroethoxy) methane

bis (2-Chloroethyl) ether < .14  
bis (2-Chloroisopropyl) ether < .14  
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clonaste .61 S

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene < .003  
Aldrin < .003  
Dieldrin < .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Pesticides/PCBs

Dimethoate	< .033	rr/l
Endosulfan sulfate	< .003	
Endrin	< .003	
Endrin aldehyde	< .022	
Endrin ketone	< .003	
Heptachlor	< .003	
Heptachlor epoxide	< .003	
Lindane	< .003	
Methoxychlor	< .003	
PCB 1016	< .013	
PCB 1221	< .013	
PCB 1232	< .013	
PCB 1242	< .013	
PCB 1248	< .013	
PCB 1254	< .013	
PCB 1260	< .013	
Toxaphene	< .3	
alpha-Benzenehexachloride	< .003	
alpha-Chlordane	< .003	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes	
-----	
Pesticides/PCBs	
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenhexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenhexachloride	< .003 j
gamma-Chlordane	< .003
Herbicides	
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01
245T	< .01
245TP	< .01
Dalapon	< .01
Dicamba	
Dichloroprop	< .01
Dinoseb	< .01
MCPA	< .2 j
MCPP	< .2
Metals	
Aluminum	16900
Antimony	< 5 j
Arsenic	9.2
Barium	96.8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Metals

Beryllium	< .5
Boron	18.4
Cadmium	< .5
Calcium	27600
Chromium	18.4
Cobalt	7.53
Copper	23
Cyanide	< .25
Iron	20000
Lead	24.6
Magnesium	11500
Manganese	661
Mercury	< .1
Nickel	21.5
Potassium	2300
Selenium	< .25 rr
Silver	< .5
Sodium	522
Thallium	18.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C39. EI Site SM25k: Historic Military Site  
Surface Soil Samples Analytical Results

Sample Name: SM25KSS006  
Depth (feet): 0  
Sample Date: 02/22/94

Analytes

Metals

Vanadium 35.3  
Zinc 92.2

Landfill Parameters

Ammonia 352 /l  
Chloride < 5  
Fluoride < 2.5 /l  
Nitrite, Nitrate -- Non-Specific 11.6 j  
Sulfate < 25

Total Organic Carbon 40400 j  
Total recoverable phenolics 1.57  
pH 7.5 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C40. EI Site SM29: Patriotic Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM029TP001 SM029TP002  
Depth (feet): 2 2  
Sample Date: 02/10/94 02/10/94

Analytes

-----  
Volatile Organic Compounds

1,1,1-Trichloroethane < .01 < .01  
1,1,2,2-Tetrachloroethane < .01 < .01  
1,1,2-Trichloroethane < .01 < .01  
1,1-Dichloroethane < .01 < .01  
1,1-Dichloroethene < .01 < .01

1,2-Dichloroethane < .01 < .01

1,2-Dichloroethenes (cis & trans) < .01 < .01

1,2-Dichloropropane < .01 < .01

2-Chloroethylvinyl ether < .01 < .01

Acetic acid, vinyl ester < .01 < .01

Acetone < .01 < .01

Benzene < .01 < .01

Bromodichloromethane < .01 < .01

Bromoform < .01 < .01

Bromomethane < .01 < .01

Carbon disulfide < .01 < .01

Carbon tetrachloride < .01 < .01

Chlorobenzene < .01 < .01

Chloroethane < .01 < .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C40. EI Site SM29: Patriotic Site  
Subsurface Soil Samples Analytical Results

Sample Name:	SM029TP001	SM029TP002
Depth (feet):	2	2
Sample Date:	02/10/94	02/10/94

Analytes

Volatile Organic Compounds

Chloroform	< .01	< .01
Chloromethane	< .01	< .01
Dibromochloromethane	< .01	< .01
Ethylbenzene	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01

Methylene chloride	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01
Methylisobutyl ketone	< .01	< .01
Styrene	< .01	< .01
Tetrachloroethene	< .01	< .01

Toluene	< .01	< .01
Trichloroethene	< .01	< .01
Vinyl chloride	< .01	< .01
Xylenes, total combined	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01

trans-1,3-Dichloropropene	< .01	< .01
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Semivolatle Organic Compounds

1,2,4-Trichlorobenzene	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table C40. EI Site SM29: Patriotic Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM029TP001 SM029TP002  
Depth (feet): 2 2  
Sample Date: 02/10/94 02/10/94

Analytes

Semivolatiles Organic Compounds

1,4-Dichlorobenzene	< .14	< .14
1-Ethyl-3-methylbenzene	.42 S	NA
2,4,5-Trichlorophenol	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3
2,4-Dichlorophenol	< .14	< .14
2,4-Dimethylphenol	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14
2-Chloronaphthalene	< .14	< .14
2-Chlorophenol	< .14	< .14
2-Methylnaphthalene	.24	< .14
2-Methylphenol	< .14	< .14
2-Nitroaniline	< .67	< .67
2-Nitrophenol	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C40. EI Site SM29: Patriotic Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM029TP001 SM029TP002  
Depth (feet): 2 2  
Sample Date: 02/10/94 02/10/94

Analytes

Semivolatiles Organic Compounds

4-Bromophenylphenyl ether	< .14	< .14
4-Chloroaniline	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14
4-Methylphenol	1	.5
4-Nitroaniline	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4
Acenaphthene	< .14	< .14
Acenaphthylene	< .14	< .14
Anthracene	< .14	< .14
Benzo[A]anthracene	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14
Benzo[a]pyrene	< .14	< .14
Benzoic acid	< 1.4	.32 JP
Benzyl alcohol	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.49 Bb	< .14
Butylbenzylphthalate	< .14	< .14
Carbazole	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C40. EI Site SM29: Patriotic Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM029TP001 SM029TP002  
Depth (feet): 2 2  
Sample Date: 02/10/94 02/10/94

Analytes

Semivolatile Organic Compounds

Chrysene	< .14	< .14
Decane	.84 S	NA
Di-N-butyl phthalate	< .14	< .14
Di-N-octyl phthalate	< .14	< .14
Dibenzo[a,h]anthracene	< .16	< .16
Dibenzofuran	< .14	< .14
Diethylphthalate	< .14	< .14
Dimethylphthalate	< .14	< .14
Fluoranthene	< .14	< .14
Fluorene	< .14	< .14

Heptacosane	1.3 S	NA
Hexachlorobenzene	NA	.42 S
Hexachlorobutadiene	< .14	< .14
Hexachlorocyclopentadiene	< .14	< .14
Hexachloroethane	< 1	< 1
Indeno[1,2,3-c,d]pyrene	< .14	< .14
Isophorone	< .16	< .16
N-Nitrosodi-N-propylamine	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table C40. EI Site SM29: Patriotic Site  
Subsurface Soil Samples Analytical Results

Sample Name: SM029TP001 SM029TP002  
Depth (feet): 2 2  
Sample Date: 02/10/94 02/10/94

Analytes

Semivolatle Organic Compounds

N-Nitrosodiphenylamine < .14 < .14  
Naphthalene < .14 < .14  
Nitrobenzene < .14 < .14  
Nonacosane .7 S 1.4 S  
Palmitic acid / Hexadecanoic acid NA 1.1 S

Pentachlorophenol < .67 < .67  
Phenanthrene < .14 < .14  
Phenol < .14 < .14  
Pyrene < .14 < .14  
Tetradecane .84 S NA

Tridecane 1.1 S NA  
bis (2-Chloroethoxy) methane < .14 < .14  
bis (2-Chloroethyl) ether < .14 < .14  
bis (2-Chloroisopropyl) ether < .14 < .14  
r-Sitosterol / (38,24s)-Stigmast-5-en-3-ol/Ctionaste NA 1.2 S

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Phase I EI Report  
IN4 210 090 003  
September 18, 1995

## **Appendix D**

### **BACKGROUND SAMPLES ANALYTICAL RESULTS**

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS001	SMBKGSS002	SMBKGSS003	SMBKGSS004
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
Analytes				
Semivolatiles Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14
2-Cyclohexen-1-ol	NA	NA	NA	NA
2-Cyclohexen-1-one	NA	.4 S	NA	NA
2-Methylnaphthalene	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS001 0 11/23/93	SMBKGSS002 0 11/23/93	SMBKGSS003 0 11/23/93	SMBKGSS004 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
2-Nitrophenol	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67	< .67	< .67	< .67
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS001 0 11/23/93	SMBKGSS002 0 11/23/93	SMBKGSS003 0 11/23/93	SMBKGSS004 0 11/23/93
-----				
Semi-volatile Organic Compounds				
Benzofalpyrene	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14	.41
Butylbenzylphthalate	< .14	< .14	< .14	< .14
Carbazole	.56 S	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	< .14	< .14
Di-N-octyl phthalate	< .14 j	< .14 j	< .14 j	< .14 j
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14
Dioctyl adipate	NA	NA	NA	NA
Fluoranthene	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14
Heptacosane	NA	.67 S	.44 S	NA
Hexachlorobenzene	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS001	SMBKGSS002	SMBKGSS003	SMBKGSS004
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
Analytes				
Semivolatile Organic Compounds				
Hexachlorobutadiene	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1 j	< 1 j	< 1 j	< 1 j
Hexachloroethane	< .14	< .14	< .14	< .14
Hexadecanoic acid	NA	1.2 S	NA	.58 S
Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14
Nonacosane	NA	.94 S	1 S	NA
Pentachlorophenol	< .67	< .67	< .67	< .67
Pentacosane	NA	NA	NA	NA
Phenanthrene	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14
beta-Sitosterol	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS001 0 11/23/93	SMBKGSS002 0 11/23/93	SMBKGSS003 0 11/23/93	SMBKGSS004 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 J	< .14 J	< .14 J	< .14 J
gamma-Sitosterol	1.4 S	NA	1.5 S	NA
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
Dimethoate	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS001	SMBKGSS002	SMBKGSS003	SMBKGSS004
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
Analytes				
-----				
Pesticides/PCBs				
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA
245T	< .01 j	< .01 j	< .01 j	< .01 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS001	SMBKGSS002	SMBKGSS003	SMBKGSS004
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
Analytes				
Herbicides				
245TP	< .01 j	< .01 j	< .01 j	< .01 j
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2
Metals				
Aluminum	7140	10700	11100	13300
Antimony	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	6.3 j	6.7 j	6.6 j	7.3 j
Barium	67.2	85.9	80.3	87.6
Beryllium	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5
Calcium	4060	4560	4820	3800
Chromium	10.9 j	14.8 j	16.1 j	17.5 j
Cobalt	6.16	8.32	8.61	9.2
Copper	12.2	17.4	17.5	20.4
Cyanide	< .25	< .25	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS001	SMBKGSS002	SMBKGSS003	SMBKGSS004
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
-----				
Analytes				
-----				
Metals				
Iron	14000	18800	19000	19000
Lead	19.6	16.1	23.4	24.8
Magnesium	2240	2950	3070	2920
Manganese	546	738	672	774
Mercury	< .1	< .1	< .1	< .1
Nickel	13	20.1	19	20.4
Potassium	1060	1740	2040	2340
Selenium	< .25	< .25	< .25	< .25
Silver	< .5	< .5	< .5	< .5
Sodium	350	336	350	409
Thallium	< 10	< 10	< 10	< 10
Vanadium	18.2	26.8	27.7	32.1
Zinc	56	68.5	81.8	80.3
Landfill Parameters				
Ammonia	223	193	340	305
Nitrite, Nitrate -- Non-Specific	4.2	3.96	4.99	4.47

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS001	SMBKGSS002	SMBKGSS003	SMBKGSS004
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93

Analytes

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS005 0 11/23/93	SMBKGSS005-DUP 0 11/23/93	SMBKGSS006 0 11/23/93	SMBKGSS007 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14 D	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14 D	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14 D	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14 D	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3 D	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3 D	< .3	< .3
2,4-Dichlorophenol	< .14	< .14 D	< .14	< .14
2,4-Dimethylphenol	< .14	< .14 D	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4 D	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14 D	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14 D	< .14	< .14
2-Chloronaphthalene	< .14	< .14 D	< .14	< .14
2-Chlorophenol	< .14	< .14 D	< .14	< .14
2-Cyclohexen-1-ol	NA	NA	NA	.44 S
2-Cyclohexen-1-one	NA	.4 S	NA	NA
2-Methylnaphthalene	< .14	< .14 D	< .14	< .14
2-Methylphenol	< .14	< .14 D	< .14	< .14
2-Nitroaniline	< .67	< .67 D	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS005	SMBKGSS005-DUP	SMBKGSS006	SMBKGSS007
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
<hr/>				
Analytes				
<hr/>				
Semivolatile Organic Compounds				
2-Nitrophenol	< .14	< .14 D	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67 D	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14 D	< .14	< .14
3-Nitroaniline	< .67 j	< .67 Dj	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4 D	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14 j	< .14 Dj	< .14 j	< .14 j
4-Chloroaniline	< .3	< .3 D	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14 D	< .14	< .14
4-Methylphenol	< .14	< .14 D	< .14	< .14
4-Nitroaniline	< .67	< .67 D	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4 D	< 1.4	< 1.4
Acenaphthene	< .14	< .14 D	< .14	< .14
Acenaphthylene	< .14	< .14 D	< .14	< .14
Anthracene	< .14 j	< .14 Dj	< .14 j	< .14 j
Benzo[A]anthracene	.45	< .14 D	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14 D	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16 D	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS005	SMBKGSS005-DUP	SMBKGSS006	SMBKGSS007
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
Analytes				
-----				
Semivolatile Organic Compounds				
Benzo[a]pyrene	< .14	< .14 D	< .14	< .14
Benzoic acid	< 1.4	< 1.4 D	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14 D	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14 J	< .14 DJ	< .14 J	< .14 J
Butylbenzylphthalate	< .14 J	< .14 DJ	< .14 J	< .14 J
Carbazole	< .14 J	< .14 DJ	< .14 J	< .14 J
Chrysene	.47	< .14 D	< .14	< .14
Di-N-butyl phthalate	.33 J	< .14 DJ	.36 J	< .14 J
Di-N-octyl phthalate	< .14 J	< .14 DJ	< .14 J	< .14 J
Dibenzo[A,H]anthracene	< .16 J	< .16 DJ	< .16 J	< .16 J
Dibenzofuran	< .14	< .14 D	< .14	< .14
Diethylphthalate	< .14	< .14 D	< .14	< .14
Dimethylphthalate	< .14	< .14 D	< .14	< .14
Diethyl adipate	NA	NA	NA	NA
Fluoranthene	< .14	< .14 D	< .14	< .14
Fluorene	< .14	< .14 D	< .14	< .14
Heptacosane	NA	.54 S	NA	NA
Hexachlorobenzene	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS005 0 11/23/93	SMBKGSS005-DUP 0 11/23/93	SMBKGSS006 0 11/23/93	SMBKGSS007 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
Hexachlorobutadiene	< .14	< .14 D	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1 D	< 1	< 1
Hexachloroethane	< .14	< .14 D	< .14	< .14
Hexadecanoic acid	NA	NA	NA	.44 S
Indeno[1,2,3-C,D]pyrene	< .16 j	< .16 Dj	< .16 j	< .16 j
Isophorone	< .14	< .14 D	< .14	< .14
N-Nitrosodi-N-propylamine	< .14 j	< .14 Dj	< .14 j	< .14 j
N-Nitrosodiphenylamine	< .14	< .14 D	< .14	< .14
Naphthalene	< .14	< .14 D	< .14	< .14
Nitrobenzene	< .14	< .14 D	< .14	< .14
Nonacosane	.93 S	NA	.7 S	NA
Pentachlorophenol	< .67	< .67 D	< .67	< .67
Pentacosane	NA	NA	NA	NA
Phenanthrene	.21	< .14 D	< .14	< .14
Phenol	< .14	< .14 D	< .14	< .14
Pyrene	< .14	< .14 D	< .14	< .14
beta-Sitosterol	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14 D	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS005 0 11/23/93	SMBKGSS005-DUP 0 11/23/93	SMBKGSS006 0 11/23/93	SMBKGSS007 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroethyl) ether	< .14	< .14 D	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 j	< .14 Dj	< .14 j	< .14 j
gamma-Sitosterol	NA	NA	NA	NA
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	.00456 D	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003 D	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	.00443 D	< .003	< .003
Aldrin	< .003	< .003 D	< .003	< .003
Dieldrin	< .003	< .003 D	< .003	< .003
Dimethoate	< .033	< .033 D	< .033	< .033
Endosulfan sulfate	< .003	< .003 D	< .003	< .003
Endrin	< .003	< .003 D	< .003	< .003
Endrin aldehyde	< .022	< .022 D	< .022	< .022
Endrin ketone	< .003	< .003 D	< .003	< .003
Heptachlor	< .003	< .003 D	< .003	< .003
Heptachlor epoxide	< .003	< .003 D	< .003	< .003
Lindane	< .003	< .003 D	< .003	< .003
Methoxychlor	< .003	< .003 D	< .003	< .003
PCB 1016	< .013	< .013 D	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS005 0 11/23/93	SMBKGSS005-DUP 0 11/23/93	SMBKGSS006 0 11/23/93	SMBKGSS007 0 11/23/93
Analytes				
Pesticides/PCBs				
PCB 1221	< .013	< .013 D	< .013	< .013
PCB 1232	< .013	< .013 D	< .013	< .013
PCB 1242	< .013	< .013 D	< .013	< .013
PCB 1248	< .013	< .013 D	< .013	< .013
PCB 1254	< .013	< .013 D	< .013	< .013
PCB 1260	< .013	< .013 D	< .013	< .013
Toxaphene	< .3	< .3 D	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003 D	< .003	< .003
alpha-Chlordane	< .003	< .003 D	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003 D	< .003	< .003
beta-Benzenehexachloride	< .003	< .003 D	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003 D	< .003	< .003
delta-Benzenehexachloride	< .003	< .003 D	< .003	< .003
gamma-Chlordane	< .003	< .003 D	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01 D	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01 D	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	NA	< .01 D	< .01	< .01
245T	< .01 J	< .01 D J	< .01 J	< .01 J

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS005 0 11/23/93	SMBKGSS005-DUP 0 11/23/93	SMBKGSS006 0 11/23/93	SMBKGSS007 0 11/23/93
Analytes				
Herbicides				
245TP	< .01 j	< .01 DJ	< .01 j	< .01 j
Dalapon	< .01	< .01 D	< .01	< .01
Dicamba	< .01	< .01 D	< .01 rr	< .01
Dichloroprop	< .01	NA	NA	NA
Dinoseb	< .01	< .01 D	< .01	< .01
MCPA	< .2	< .2 D	< .2	< .2
MCPB	< .2	< .2 D	< .2	< .2 rr
Metals				
Aluminum	11700	9930 D	8640	8780
Antimony	< 5 j	< 5 DJ	< 5 j	< 5 j
Arsenic	6.6 j	6.7 DJ	7 j	7.3 j
Barium	66.5	60.4 D	< 39.8	< 39.8
Beryllium	< .5	< .5 D	< .5	< .5
Cadmium	< .5	< .5 D	< .5	< .5
Calcium	2790	2550 D	15300	2930
Chromium	16 j	13.4 DJ	12.4 j	13.2 j
Cobalt	7.85	7.38 D	5.99	6
Copper	14.6	13.4 D	13	26.4
Cyanide	< .25	< .25 D	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS005	SMBKGSS005-DUP	SMBKGSS006	SMBKGSS007
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93
<hr/>				
Analytes				
<hr/>				
Metals				
Iron	17300	16100 D	13900	14600
Lead	22.6	22.8 D	20.9	29.3
Magnesium	2660	2280 D	8360	2050
Manganese	652	617 D	487	425
Mercury	< .1	< .1 D	< .1	< .1
<hr/>				
Nickel	17.3	16.1 D	13.2	12.9
Potassium	2130	1740 D	1530	1420
Selenium	< .25	< .25 D	< .25	< .25
Silver	< .5	< .5 D	< .5	< .5
Sodium	346	309 D	418	410
<hr/>				
Thallium	< 10	< 10 D	< 10	< 10
Vanadium	27.9 J	24.2 DJ	22.3 J	23.4 J
Zinc	69.1	61.7 D	55.7	234
<hr/>				
Landfill Parameters				
Ammonia	263 J	313 D	297 J	331
Nitrite, Nitrate -- Non-Specific	3.64	6.82 D	8.7	1.26

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS005	SMBKGSS005-DUP	SMBKGSS006	SMBKGSS007
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/23/93	11/23/93	11/23/93

Analytes

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS008	SMBKGSS009	SMBKGSS010	SMBKGSS011
Depth (feet):	0	0	0	0
Sample Date:	12/20/93	11/23/93	11/23/93	11/23/93
-----				
Analytes				
-----				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14 j	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14
2-Cyclohexen-1-ol	NA	NA	NA	NA
2-Cyclohexen-1-one	NA	NA	NA	NA
2-Methylnaphthalene	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67 j	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS008 0 12/20/93	SMBKGSS009 0 11/23/93	SMBKGSS010 0 11/23/93	SMBKGSS011 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
2-Nitrophenol	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14 j	< .14 j	< .14 j
4-Chloroaniline	< .3 j	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14 j	< .14 j	< .14 j
Benzo[a]anthracene	< .14	< .14	.28	< .14
Benzo[b]fluoranthene	< .14	< .14	.24	< .14
Benzo[g,h,i]perylene	< .16	< .16	< .16	< .16
Benzo[k]fluoranthene	< .14	< .14	.26	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS008 0 12/20/93	SMBKGSS009 0 11/23/93	SMBKGSS010 0 11/23/93	SMBKGSS011 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
Benzo[a]pyrene	< .14	< .14	.23	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14 j	< .14 j	< .14 j	< .14 j
Butylbenzylphthalate	< .14 j	< .14 j	< .14 j	< .14 j
Carbazole	< .14	< .14 j	< .14 j	< .14 j
Chrysene	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	.48 b	.95 j	.95 j	< .14 j
Di-N-octyl phthalate	< .14 j	< .14 j	< .14 j	< .14 j
Dibenzo[A,H]anthracene	< .16	< .16 j	< .16 j	< .16 j
Dibenzofuran	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14
Dioctyl adipate	NA	1 S	.71 S	NA
Fluoranthene	< .14	< .14	.61	< .14
Fluorene	< .14	< .14	< .14	< .14
Heptacosane	NA	NA	NA	.59 S
Hexachlorobenzene	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS008 0 12/20/93	SMBKGSS009 0 11/23/93	SMBKGSS010 0 11/23/93	SMBKGSS011 0 11/23/93
Analytes				
Semivolatiles Organic Compounds				
Hexachlorobutadiene	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14
Hexadecanoic acid	NA	NA	NA	NA
Indeno[1,2,3-C,D]pyrene	< .16	< .16 j	< .16 j	< .16 j
Isophorone	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14 j	< .14 j	< .14 j	< .14 j
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14
Nonacosane	NA	NA	.99 S	NA
Pentachlorophenol	< .67	< .67	< .67	< .67
Pentacosane	NA	NA	NA	NA
Phenanthrene	< .14	< .14	.27	< .14
Phenol	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	.6	< .14
beta-Sitosterol	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS008 0 12/20/93	SMBKGSS009 0 11/23/93	SMBKGSS010 0 11/23/93	SMBKGSS011 0 11/23/93
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14 j	< .14 j	< .14 j
gamma-Sitosterol	NA	.44 S	NA	NA
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	.00724	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.00781	< .003
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
Dimethoate	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS008 0 12/20/93	SMBKGSS009 0 11/23/93	SMBKGSS010 0 11/23/93	SMBKGSS011 0 11/23/93
Analytes				
Pesticides/PCBs				
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 /N	< .01	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01	< .01	< .01
245T	< .01 /JN	< .01 j	< .01 j	< .01 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS008 0 12/20/93	SMBKGSS009 0 11/23/93	SMBKGSS010 0 11/23/93	SMBKGSS011 0 11/23/93
Analytes				
Herbicides				
245TP	< .01	< .01 J	< .01 J	< .01 J
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01 r
Dichloroprop	NA	NA	NA	NA
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2
Metals				
Aluminum	11900	12200	8660	8530
Antimony	< 5	< 5 J	< 5 J	< 5 J
Arsenic	11	7.3 J	7.1 J	6.6 J
Barium	66.1	74.9	71	77.9
Beryllium	1.08	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5
Calcium	2910	6020	4690	2060
Chromium	17.2	16.2 J	12.5 J	11.8 J
Cobalt	8.32	7.93	8.38	4.12
Copper	22.5	19.1	38.4	10.7
Cyanide	< .25	< .25	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS008	SMBKGSS009	SMBKGSS010	SMBKGSS011
Depth (feet):	0	0	0	0
Sample Date:	12/20/93	11/23/93	11/23/93	11/23/93
Analytes				
-----				
Metals				
Iron	18500	17600	15600	12100
Lead	23.8	26.4	95.2	23.5
Magnesium	2770	3960	2560	1760
Manganese	370	441	668	338
Mercury	< .1	< .1	< .1	< .1
Nickel	17.2	17.6	14.2	11.3
Potassium	2380	2500	1420	941
Selenium	.542 j	< .25	.384	.397
Silver	< .5	< .5	< .5	< .5
Sodium	264	352	327	309
Thallium	< 10 j	< 10	< 10	< 10
Vanadium	29.1 j	30.8 j	22.7 j	20.6 j
Zinc	71.3	74.9	86.6	52.9
Landfill Parameters				
Ammonia	231	332	361 x	331
Nitrite, Nitrate -- Non-Specific	8.63	6.58	3.59	1.14 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS008	SMBKGSS009	SMBKGSS010	SMBKGSS011
Depth (feet):	0	0	0	0
Sample Date:	12/20/93	11/23/93	11/23/93	11/23/93

Analytes

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS012 0 11/23/93	SMBKGSS013 0 11/29/93	SMBKGSS015 0 11/29/93	SMBKGSS016 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14
2-Cyclohexen-1-ol	NA	NA	NA	.62 S
2-Cyclohexen-1-one	NA	NA	.56 S	.78 S
2-Methylnaphthalene	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS012	SMBKGSS013	SMBKGSS015	SMBKGSS016
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/29/93	11/29/93	11/29/93
Analytes				
-----				
Semivolatile Organic Compounds				
2-Nitrophenol	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67	< .67	< .67
4,6-Dinitro-2-cresol	< 1.4	< 1.4 j	< 1.4 j	< 1.4 j
4-Bromophenylphenyl ether	< .14 j	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14
Anthracene	< .14 j	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS012 0 11/23/93	SMBKGSS013 0 11/29/93	SMBKGSS015 0 11/29/93	SMBKGSS016 0 11/29/93
Analytes				
Semivolatiles Organic Compounds				
Benzo[a]pyrene	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14 j	< .14	< .14	< .14
Butylbenzylphthalate	< .14 j	< .14	< .14	< .14
Carbazole	< .14 j	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14 j	< .14	< .14	.22 JP
Di-N-octyl phthalate	< .14 j	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16 j	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14
Dioctyl adipate	NA	NA	NA	NA
Fluoranthene	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14
Heptacosane	NA	NA	.7 S	1.1 S
Hexachlorobenzene	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS012 0 11/23/93	SMBKGSS013 0 11/29/93	SMBKGSS015 0 11/29/93	SMBKGSS016 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
Hexachlorobutadiene	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1 j	< 1 j	< 1 j
Hexachloroethane	< .14	< .14	< .14	< .14
Hexadecanoic acid	NA	NA	.7 S	NA
Indeno[1,2,3-C,D]pyrene	< .16 j	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14 j	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14
Nonacosane	1.1 S	.78 S	.84 S	6.2 S
Pentachlorophenol	< .67	< .67	< .67	< .67
Pentacosane	NA	.52 S	.56 S	NA
Phenanthrene	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14
beta-Sitosterol	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS012 0 11/23/93	SMBKGSS013 0 11/29/93	SMBKGSS015 0 11/29/93	SMBKGSS016 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 j	< .14	< .14	< .14
gamma-Sitosterol	NA	1 S	.98 S	1.4 S
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003
Dimethoate	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS012 0 11/23/93	SMBKGSS013 0 11/29/93	SMBKGSS015 0 11/29/93	SMBKGSS016 0 11/29/93
Analytes				
Pesticides/PCBs				
PCB 1221	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01 rr	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	< .01	NA	NA	NA
245T	< .01 j	< .01 j	< .01 j	< .01 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS012	SMBKGSS013	SMBKGSS015	SMBKGSS016
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/29/93	11/29/93	11/29/93
<hr/>				
Analytes				
<hr/>				
Herbicides				
245TP	< .01 j	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01
Dichloroprop	NA	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01
<hr/>				
MCPA	< .2	< .2	< .2	< .2
MCPB	< .2	< .2 j	< .2 j	< .2 j
<hr/>				
Metals				
Aluminum	9850	15600 j	10600 j	17100 j
Antimony	< 5 j	< 5 j/j	< 5 j/j	< 5 j/j
Arsenic	6.1 j	6.36 rr	8.4 j	5.76 j
Barium	< 39.8	94.7	84	156
Beryllium	< .5	< .5	< .5	.903
<hr/>				
Cadmium	< .5	< .5	< .5	< .5
Calcium	1820	9990	2100	6230
Chromium	12.3 j	19.5	12.6	21.8
Cobalt	3.79	7.26	6.3	11.1
Copper	9.7	20.8	18.2	26.5
<hr/>				
Cyanide	< .25	< .25	< .25	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS012	SMBKGSS013	SMBKGSS015	SMBKGSS016
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/29/93	11/29/93	11/29/93
-----				
Analytes				
-----				
Metals				
Iron	10800	19500	13000	23400
Lead	28.8	32.4	29.4	35.8
Magnesium	1820	6230	1820	3890
Manganese	123	285	476	763
Mercury	< .1	< .1	< .1	< .1
Nickel	9.55	19.5	9.8	24.9
Potassium	1030	1690	882	2180
Selenium	.379 P	.486 rr	.378 bj	.514 bj
Silver	< .5	< .5	< .5	< .5
Sodium	348	376	378	421
Thallium	< 10	< 10	< 10	< 10
Vanadium	24.2 J	33.7	26.6	38.9
Zinc	48.5	68.7	50.4	106
Landfill Parameters				
Ammonia	353	259	216	338
Nitrite, Nitrate -- Non-Specific	1.73	.913	.413 b	3.29

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS012	SMBKGSS013	SMBKGSS015	SMBKGSS016
Depth (feet):	0	0	0	0
Sample Date:	11/23/93	11/29/93	11/29/93	11/29/93

Analytes

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS017	SMBKGSS018	SMBKGSS018-DUP	SMBKGSS019
Depth (feet):	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/29/93	11/29/93
<hr/>				
Analytes				
<hr/>				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14 D	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14 D	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14 D	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14 D	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3 D	< .3
<hr/>				
2,4,6-Trichlorophenol	< .3	< .3	< .3 D	< .3
2,4-Dichlorophenol	< .14	< .14	< .14 D	< .14
2,4-Dimethylphenol	< .14	< .14	< .14 D	< .14
2,4-Dinitrophenol	< 1.4 J	< 1.4 J	< 1.4 Dj	< 1.4 J
2,4-Dinitrotoluene	< .14	< .14	< .14 D	< .14
<hr/>				
2,6-Dinitrotoluene	< .14	< .14	< .14 D	< .14
2-Chloronaphthalene	< .14	< .14	< .14 D	< .14
2-Chlorophenol	< .14	< .14	< .14 D	< .14
2-Cyclohexen-1-ol	.55 S	.58 S	NA	.42 S
2-Cyclohexen-1-one	.97 S	.72 S	NA	.56 S
<hr/>				
2-Methylnaphthalene	< .14	< .14	< .14 D	< .14
2-Methylphenol	< .14	< .14	< .14 D	< .14
2-Nitroaniline	< .67	< .67	< .67 D	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS017 0 11/29/93	SMBKGSS018 0 11/29/93	SMBKGSS018-DUP 0 11/29/93	SMBKGSS019 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
2-Nitrophenol	< .14	< .14	< .14 D	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67 D	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14 D	< .14
3-Nitroaniline	< .67	< .67	< .67 D	< .67
4,6-Dinitro-2-cresol	< 1.4 j	< 1.4 j	< 1.4 Dj	< 1.4 j
4-Bromophenylphenyl ether	< .14	< .14	< .14 D	< .14
4-Chloroaniline	< .3	< .3	< .3 D	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14 D	< .14
4-Methylphenol	< .14	< .14	< .14 D	< .14
4-Nitroaniline	< .67	< .67	< .67 D	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4 D	< 1.4
Acenaphthene	< .14	< .14	< .14 D	< .14
Acenaphthylene	< .14	< .14	< .14 D	< .14
Anthracene	< .14	< .14	< .14 D	< .14
Benzo[A]anthracene	< .14	< .14	< .14 D	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14 D	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16 D	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14 D	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS017 0 11/29/93	SMBKGSS018 0 11/29/93	SMBKGSS018-DUP 0 11/29/93	SMBKGSS019 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
Benzo[a]pyrene	< .14	< .14	< .14 D	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4 D	< 1.4
Benzyl alcohol	< .14	< .14	< .14 D	< .14
Bis (2-Ethylhexyl) phthalate	< .14	.22 b	< .14 D	< .14
Butylbenzylphthalate	< .14	< .14	< .14 D	< .14
Carbazole	< .14	< .14	< .14 D	< .14
Chrysene	< .14	< .14	< .14 D	< .14
Di-N-butyl phthalate	< .14	< .14	.52 D	< .14
Di-N-octyl phthalate	< .14	< .14	< .14 D	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16 D	< .16
Dibenzofuran	< .14	< .14	< .14 D	< .14
Diethylphthalate	< .14	< .14	< .14 D	< .14
Dimethylphthalate	< .14	< .14	< .14 D	< .14
Dioctyl adipate	NA	NA	NA	NA
Fluoranthene	< .14	< .14	< .14 D	< .14
Fluorene	< .14	< .14	< .14 D	< .14
Heptacosane	NA	NA	NA	NA
Hexachlorobenzene	< .14	< .14	< .14 D	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS017 0 11/29/93	SMBKGSS018 0 11/29/93	SMBKGSS018-DUP 0 11/29/93	SMBKGSS019 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
Hexachlorobutadiene	< .14	< .14	< .14 D	< .14
Hexachlorocyclopentadiene	< 1 j	< 1 j	< 1 Dj	< 1 j
Hexachloroethane	< .14	< .14	< .14 D	< .14
Hexadecanoic acid	NA	.87 S	NA	1.1 S
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16 D	< .16
Isophorone	< .14	< .14	< .14 D	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14 D	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14 D	< .14
Naphthalene	< .14	< .14	< .14 D	< .14
Nitrobenzene	< .14	< .14	< .14 D	< .14
Nonacosane	NA	4.3 S	2.8 DS	4.2 S
Pentachlorophenol	< .67	< .67	< .67 D	< .67
Pentacosane	NA	NA	NA	NA
Phenanthrene	< .14	< .14	< .14 D	< .14
Phenol	< .14	< .14	< .14 D	< .14
Pyrene	< .14	< .14	< .14 D	< .14
beta-Sitosterol	NA	2.9 S	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14 D	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS017 0 11/29/93	SMBKGSS018 0 11/29/93	SMBKGSS018-DUP 0 11/29/93	SMBKGSS019 0 11/29/93
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroethyl) ether	< .14	< .14	< .14 D	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14 D	< .14
gamma-Sitosterol	.55 S	NA	2.8 DS	2.8 S
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003 D	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003 D	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003 D	< .003
Aldrin	< .003	< .003	< .003 D	< .003
Dieldrin	< .003	< .003	< .003 D	< .003
Dimethoate	< .033	< .033	< .033 D	< .033
Endosulfan sulfate	< .003	< .003	< .003 D	< .003
Endrin	< .003	< .003	< .003 D	< .003
Endrin aldehyde	< .022	< .022	< .022 D	< .022
Endrin ketone	< .003	< .003	< .003 D	< .003
Heptachlor	< .003	< .003	< .003 D	< .003
Heptachlor epoxide	< .003	< .003	< .003 D	< .003
Lindane	< .003	< .003	< .003 D	< .003
Methoxychlor	< .003	< .003	< .003 D	< .003
PCB 1016	< .013	< .013	< .013 D	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS017 0 11/29/93	SMBKGSS018 0 11/29/93	SMBKGSS018-DUP 0 11/29/93	SMBKGSS019 0 11/29/93
Analytes				
Pesticides/PCBs				
PCB 1221	< .013	< .013	< .013 D	< .013
PCB 1232	< .013	< .013	< .013 D	< .013
PCB 1242	< .013	< .013	< .013 D	< .013
PCB 1248	< .013	< .013	< .013 D	< .013
PCB 1254	< .013	< .013	< .013 D	< .013
PCB 1260	< .013	< .013	< .013 D	< .013
Toxaphene	< .3	< .3	< .3 D	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003 D	< .003
alpha-Chlordane	< .003	< .003	< .003 D	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003 D	< .003
beta-Benzenhexachloride	< .003	< .003	< .003 D	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003 D	< .003
delta-Benzenhexachloride	< .003	< .003	< .003 D	< .003
gamma-Chlordane	< .003	< .003	< .003 D	< .003
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01 D	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01 D	< .01
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA
245T	< .01 J	< .01 J	< .01 D J	< .01 r

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: Depth (feet): Sample Date:	SMBKGSS017 0 11/29/93	SMBKGSS018 0 11/29/93	SMBKGSS018-DUP 0 11/29/93	SMBKGSS019 0 11/29/93
Analytes				
Herbicides				
245TP	< .01	< .01	< .01 D	< .01
Dalapon	< .01	< .01	< .01 D	< .01
Dicamba	< .01	< .01	< .01 D	< .01
Dichloroprop	< .01	< .01	< .01 D	< .01
Dinoseb	< .01	< .01	< .01 D	< .01
MCPA	< .2	< .2	< .2 D	< .2
MCPP	< .2 J	< .2 J	< .2 Dj	< .2 J
Metals				
Aluminum	12400 J	8830 J	9930 Dj	11100 J
Antimony	< 5 J/J	< 5 J/J	< 5 Dj/J	< 5 J/J
Arsenic	6.9 J	7.2 J	6.4 Dj	7 J
Barium	91.3	75.3	76.6 D	153
Beryllium	< .5	< .5	< .5 D	< .5
Cadmium	< .5	< .5	< .5 D	< .5
Calcium	3320	2600	2840 D	3340
Chromium	16.6	11.6	12.6 D	13.5
Cobalt	6.5	6.95	7.09 D	15.3
Copper	18	9.7	9.5 D	10.7
Cyanide	< .25	< .25	< .25 D	< .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS017	SMBKGSS018	SMBKGSS018-DUP	SMBKGSS019
Depth (feet):	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/29/93	11/29/93
-----				
Analytes				
-----				
Metals				
Iron	16600	13600	13900 D	20900
Lead	23.5	23.2	25.5 D	37.6
Magnesium	2900	1880	1990 D	2090
Manganese	332	608	596 D	1530
Mercury	< .1	< .1	< .1 D	< .1
Nickel	16.6	10.7	10.9 D	13.6
Potassium	1520	695	809 D	947
Selenium	< .25	< .25	< .25 D	< .25
Silver	< .5	< .5	< .5 D	< .5
Sodium	387	405	397 D	418
Thallium	< 10	< 10	< 10 D	< 10
Vanadium	29	23.2	25.5 D	36.2
Zinc	69.2	40.5	42.6 D	57.1
Landfill Parameters				
Ammonia	364 X	233	221 D	294
Nitrite, Nitrate -- Non-Specific	3.07	.923	.921 D	2.91

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS017	SMBKGSS018	SMBKGSS018-DUP	SMBKGSS019
Depth (feet):	0	0	0	0
Sample Date:	11/29/93	11/29/93	11/29/93	11/29/93

Analytes

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3
2,4-Dichlorophenol	< .14	< .14
2,4-Dimethylphenol	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14
2-Chloronaphthalene	< .14	< .14
2-Chlorophenol	< .14	< .14
2-Cyclohexen-1-ol	NA	NA
2-Cyclohexen-1-one	.45 S	.61 S
2-Methylnaphthalene	< .14	< .14
2-Methylphenol	< .14	< .14
2-Nitroaniline	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes

Semivolatile Organic Compounds

2-Nitrophenol	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14
3-Nitroaniline	< .67	< .67
4,6-Dinitro-2-cresol	< 1.4 j	< 1.4 j
4-Bromophenylphenyl ether	< .14	< .14
4-Chloroaniline	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14
4-Methylphenol	< .14	< .14
4-Nitroaniline	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4
Acenaphthene	< .14	< .14
Acenaphthylene	< .14	< .14
Anthracene	< .14	< .14
Benzo[A]anthracene	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name:	SMBKGSS020	SMBKGSS021
Depth (feet):	0	0
Sample Date:	11/29/93	11/29/93

Analytes

Semivolatile Organic Compounds

Benzo[a]pyrene	< .14	< .14
Benzoic acid	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	.26 b
Butylbenzylphthalate	< .14	< .14

Carbazole	< .14	< .14
Chrysene	< .14	< .14
Di-N-butyl phthalate	.45	.53
Di-N-octyl phthalate	< .14	< .14
Dibenz[a,h]anthracene	< .16	< .16

Dibenzofuran	< .14	< .14
Diethylphthalate	< .14	< .14
Dimethylphthalate	< .14	< .14
Dioctyl adipate	NA	NA
Fluoranthene	< .14	< .14

Fluorene	< .14	< .14
Heptacosane	1.2 S	NA
Hexachlorobenzene	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes

Semivolatiles Organic Compounds

Hexachlorobutadiene	< .14	< .14
Hexachlorocyclopentadiene	< 1 j	< 1 j
Hexachloroethane	< .14	< .14
Hexadecanoic acid	NA	NA
Indeno[1,2,3-C,D]pyrene	< .16	< .16
Isophorone	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14
Naphthalene	< .14	< .14
Nitrobenzene	< .14	< .14
Nonacosane	3 S	3 S
Pentachlorophenol	< .67	< .67
Pentacosane	NA	NA
Phenanthrene	< .14	< .14
Phenol	< .14	< .14
Pyrene	< .14	< .14
beta-Sitosterol	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes

Semivolatile Organic Compounds

bis (2-Chloroethyl) ether	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14
gamma-Sitosterol	1.5 S	3 S

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003
Aldrin	< .003	< .003
Dieldrin	< .003	< .003

Dimethoate

Endosulfan sulfate	< .033	< .033
Endrin	< .003	< .003
Endrin aldehyde	< .022	< .022
Endrin ketone	< .003	< .003

Heptachlor

Heptachlor epoxide	< .003	< .003
Lindane	< .003	< .003
Methoxychlor	< .003	< .003
PCB 1016	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes		
-----		
Pesticides/PCBs		
PCB 1221	< .013	< .013
PCB 1232	< .013	< .013
PCB 1242	< .013	< .013
PCB 1248	< .013	< .013
PCB 1254	< .013	< .013
PCB 1260	< .013	< .013
Toxaphene	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003
alpha-Chlordane	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003
beta-Benzenehexachloride	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003
delta-Benzenehexachloride	< .003	< .003
gamma-Chlordane	< .003	< .003
Herbicides		
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA
245T	< .01 j	< .01 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes

Herbicides

245TP < .01 < .01  
Dalapon < .01 < .01  
Dicamba < .01 < .01  
Dichloroprop < .01 < .01  
Dinoseb < .01 < .01

MCPA

MCPA < .2 .457  
MCPB < .2 j < .2 j

Metals

Aluminum 10600 j 12800 j  
Antimony < 5 j/j < 5 j/j  
Arsenic 7.6 j 7.6 j  
Barium 95.5 79.1  
Beryllium < .5 < .5

Cadmium

Calcium < .5 < .5  
Chromium 4550 1830  
Cobalt 13.3 16.7  
Copper 8.48 8.37  
Copper 13.2 8.98

Cyanide

< .25 < .25

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D1:  
Background Surface Soil Samples Analytical Results  
Sites SMBKGSS001 through SMBKGSS021, excluding SMBKGSS014

Sample Name: SMBKGSS020 SMBKGSS021  
Depth (feet): 0 0  
Sample Date: 11/29/93 11/29/93

Analytes

Metals

Iron 15200 16700  
Lead 40.9 39.6  
Magnesium 2270 2130  
Manganese 924 518  
Mercury < .1 < .1

Nickel

Potassium 14.5 11  
Selenium 1440 1230  
Silver < .25 .396  
Sodium < .5 < .5  
424 487

Thallium

Vanadium < 10 < 10  
Zinc 27.3 33.5  
57.6 62.4

Landfill Parameters

Ammonia 286 314  
Nitrite, Nitrate -- Non-Specific 1.68 .651 b

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name:	SMBKGSB001	SMBKGSB001	SMBKGSB001	SMBKGSB002	SMBKGSB002
Depth (feet):	1	2.5	5	1	3.5
Sample Date:	11/17/93	11/17/93	11/17/93	11/20/93	11/20/93
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01 j	< .01 j
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01 j	< .01 j	< .01 j	< .01	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01 R	< .01 R	< .01 R	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01 J	< .01 J	< .01 J	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	NA	NA	NA	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
o,p-Xylene	< .01 R	< .01 R	< .01 R	NA	NA
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3 j	< .3 j	< .3 j	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14 j	< .14 j
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67 j	< .67	< .67 j	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67 j	< .67 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
Semivolatile Organic Compounds					
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4	< 1.4 j
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14	< .14 j
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14	< .14 j
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16	< .16 j
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14	< .14 j
Benzo[a]pyrene	< .14	< .14	< .14	< .14	< .14 j
Benzoic acid	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
Semivolatiles Organic Compounds					
Benzyl alcohol	< .14 R	< .14 R	< .14 R	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14	.28	.21 j
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14 j
Carbazole	< .14 R	< .14 R	< .14 R	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14	< .14 j
Di-N-butyl phthalate	< .14	< .14	< .14	< .14	.23
Di-N-octyl phthalate	< .14 j	< .14 j	< .14 j	< .14	< .14 j
Dibenzo[A,H]anthracene	< .16	< .16	< .16	< .16	< .16 j
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14 R	< .14 R	< .14 R	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16	< .16

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
Semivolatile Organic Compounds					
Isophorone	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14
Pentachlorophenol	< .67 J	< .67 J	< .67 J	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	< .14 J
Toluene	.24 S	.25 S	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 J	< .14 J	< .14 J	< .14	< .14
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
Pesticides/PCBs					
Dimethoate	< .033 rr	< .033 rr	< .033 rr	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name:	SMBKGSB001	SMBKGSB001	SMBKGSB001	SMBKGSB002	SMBKGSB002
Depth (feet):	1	2.5	5	1	3.5
Sample Date:	11/17/93	11/17/93	11/17/93	11/20/93	11/20/93
Analytes					
-----					
Pesticides/PCBs					
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01 / J	< .01 / J	< .01 / J	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	.0245	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .4 K	< .4 K
Metals					
Aluminum	14400	22200	18600	17800	6820
Antimony	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: Depth (feet): Sample Date:	SMBKGSB001 1 11/17/93	SMBKGSB001 2.5 11/17/93	SMBKGSB001 5 11/17/93	SMBKGSB002 1 11/20/93	SMBKGSB002 3.5 11/20/93
Analytes					
Metals					
Arsenic	12 j	4.9 j	1.9 rr	3.3 rr	3.9 rr
Barium	82.7	112	78.1	106	< 39.8
Beryllium	< .5	.837	.644	.667	< .5
Boron	18	17.2	16.1	15.6	19
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	34800	5300	4210	41200	104000
Chromium	21.6 j	29.6 j	26 j	21.1 j	11 j
Cobalt	8.51	9.48	6.82	8.9	6.49
Copper	20.4	28.3	27.3	21.1	15.7
Cyanide	< .25 j	< .25	< .25 j	< .25	< .25
Iron	19200	22200	22300	22200	13400
Lead	13.2	20.9	14.9	14.5	6.04
Magnesium	12000	4930	4580	13300	31300
Manganese	360	357	149	456	369
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	21.6	28.3	24.8	28.9	20.1
Potassium	2040	2090	2230	2000	1570
Selenium	< .25	< .25	< .25 rr/NJ	< .25 rr/NJ	< .25 rr/NJ

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB001 SMBKGSB001 SMBKGSB001 SMBKGSB002  
Depth (feet): 1 2.5 5 1  
Sample Date: 11/17/93 11/17/93 11/17/93 11/20/93

-----  
Analytes

Metals

Silver	< .5	< .5	< .5	< .5
Sodium	372	296	335	356
Thallium	< 10	< 10	< 10	15.6
Vanadium	37.2 j	53 j	45.8 j	41.2 j
Zinc	65.9	83.7	76.8	66.7

Landfill Parameters

Ammonia	19.1 bj	45.4 j	24 bj	25.7 bj	14.8 bj
Chloride	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Fluoride	3.97 rr	4.72 rr	4.6 rr	5.75 rr	< 2.5 rr
Nitrite, Nitrate -- Non-Specific	.838 b	.623 b	.467 b	1.2	.451 bj
Sulfate	< 25 j	< 25 j	< 25 j	< 25 j	< 25 j

Total Organic Carbon	26	8.4	2.6	28	44
Total recoverable phenolics	< 1 j	< 1 j	< 1 j	< 1 j	< 1
pH	7.9	7.7	7.6	8.2 j	8

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name:	SMBKGSB001	SMBKGSB001	SMBKGSB001	SMBKGSB002	SMBKGSB002
Depth (feet):	1	2.5	5	1	3.5
Sample Date:	11/17/93	11/17/93	11/17/93	11/20/93	11/20/93

Analytes

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
-----	
Volatile Organic Compounds	
1,1,1-Trichloroethane	< .01
1,1,2,2-Tetrachloroethane	< .01
1,1,2-Trichloroethane	< .01
1,1-Dichloroethane	< .01
1,1-Dichloroethene	< .01
1,2-Dichloroethane	< .01
1,2-Dichloroethenes (cis & trans)	< .01
1,2-Dichloropropane	< .01
2-Chloroethylvinyl ether	< .01 J
Acetic acid, vinyl ester	< .01
Acetone	< .01
Benzene	< .01
Bromodichloromethane	< .01
Bromoform	< .01
Bromomethane	< .01
Carbon disulfide	< .01
Carbon tetrachloride	< .01
Chlorobenzene	< .01

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
-----	
Volatile Organic Compounds	
Chloroethane	< .01
Chloroform	< .01
Chloromethane	< .01
Dibromochloromethane	< .01
Ethylbenzene	< .01
Methyl-N-butyl ketone	< .01
Methylene chloride	< .01
Methylethyl ketone/2-Butanone	< .01
Methylisobutyl ketone	< .01
Styrene	< .01
Tetrachloroethene	< .01
Toluene	< .01
Trichloroethene	< .01
Vinyl chloride	< .01
Xylenes, total combined	< .01
cis-1,3-Dichloropropene	< .01
o,p-Xylene	NA
trans-1,3-Dichloropropene	< .01

-----

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
-----	
Semivolatile Organic Compounds	
1,2,4-Trichlorobenzene	< .14
1,2-Dichlorobenzene	< .14
1,3-Dichlorobenzene	< .14
1,4-Dichlorobenzene	< .14
2,4,5-Trichlorophenol	< .3
2,4,6-Trichlorophenol	< .3
2,4-Dichlorophenol	< .14
2,4-Dimethylphenol	< .14
2,4-Dinitrophenol	< 1.4 j
2,4-Dinitrotoluene	< .14 j
2,6-Dinitrotoluene	< .14
2-Chloronaphthalene	< .14
2-Chlorophenol	< .14
2-Methylnaphthalene	< .14
2-Methylphenol	< .14
2-Nitroaniline	< .67
2-Nitrophenol	< .14
3,3'-Dichlorobenzidine	< .67 j

-----

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes

Semivolatile Organic Compounds

3-Methyl-4-chlorophenol < .14  
3-Nitroaniline < .67 j  
4,6-Dinitro-2-cresol < 1.4  
4-Bromophenylphenyl ether < .14  
4-Chloroaniline < .3 j

4-Chlorophenylphenyl ether

4-Methylphenol < .14  
4-Nitroaniline < .67 j  
4-Nitrophenol < 1.4 j  
Acenaphthene < .14

Acenaphthylene

Anthracene < .14  
Benzo[A]anthracene < .14  
Benzo[B]fluoranthene < .14 j  
Benzo[G,H,I]perylene < .16 j

Benzo[K]fluoranthene

Benzo[a]pyrene < .14 j  
Benzoic acid < 1.4 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
Semivolatile Organic Compounds	
Benzyl alcohol	< .14
Bis (2-Ethylhexyl) phthalate	< .14
Butylbenzylphthalate	< .14
Carbazole	< .14
Chrysene	< .14
Di-N-butyl phthalate	< .14
Di-N-octyl phthalate	< .14 J
Dibenzo[A,H]anthracene	< .16 J
Dibenzofuran	< .14
Diethylphthalate	< .14
Dimethylphthalate	< .14
Fluoranthene	< .14
Fluorene	< .14
Hexachlorobenzene	< .14
Hexachlorobutadiene	< .14
Hexachlorocyclopentadiene	< 1
Hexachloroethane	< .14
Indeno[1,2,3-c,D]pyrene	< .16

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
-----	
Semivolatile Organic Compounds	
Isophorone	< .14
N-Nitrosodi-N-propylamine	< .14
N-Nitrosodiphenylamine	< .14
Naphthalene	< .14
Nitrobenzene	< .14
Pentachlorophenol	< .67
Phenanthrene	< .14
Phenol	< .14
Pyrene	< .14
Toluene	NA
bis (2-Chloroethoxy) methane	< .14
bis (2-Chloroethyl) ether	< .14
bis (2-Chloroisopropyl) ether	< .14
Pesticides/PCBs	
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003
Aldrin	< .003
Dieldrin	< .003

-----

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
Pesticides/PCBs	
Dimethoate	< .033
Endosulfan sulfate	< .003
Endrin	< .003
Endrin aldehyde	< .022
Endrin ketone	< .003
Heptachlor	< .003
Heptachlor epoxide	< .003
Lindane	< .003
Methoxychlor	< .003
PCB 1016	< .013
PCB 1221	< .013
PCB 1232	< .013
PCB 1242	< .013
PCB 1248	< .013
PCB 1254	< .013
PCB 1260	< .013
Toxaphene	< .3
alpha-Benzenehexachloride	< .003

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
-----	
Pesticides/PCBs	
alpha-Chlordane	< .003
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenhexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenhexachloride	< .003
gamma-Chlordane	< .003
Herbicides	
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01
245T	< .01
245TP	< .01
Dalapon	< .01
Dicamba	< .01
Dichloroprop	< .01
Dinoseb	< .01
MCPA	< .2
MCPP	< .4 K
Metals	
Aluminum	6570
Antimony	< 5 J

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes	
-----	
Metals	
Arsenic	5.1 rr
Barium	48.7
Beryllium	< .5
Boron	12.5
Cadmium	< .5
Calcium	90600
Chromium	11.3 j
Cobalt	6.46
Copper	17
Cyanide	< .25
Iron	14700
Lead	7.7
Magnesium	30600
Manganese	294
Mercury	< .1
Nickel	17
Potassium	1250
Selenium	< .25 rr/NJ

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2A.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB001 and SMBKGSB002

Sample Name: SMBKGSB002  
Depth (feet): 5  
Sample Date: 11/20/93

Analytes

Metals

Silver	< .5
Sodium	396
Thallium	23.8
Vanadium	20.4 j
Zinc	49.8

Landfill Parameters

Ammonia	11.7 bj
Chloride	< 5 j
Fluoride	2.94 rr
Nitrite, Nitrate -- Non-Specific	.358 b
Sulfate	< 25 j

Total Organic Carbon

Total recoverable phenolics	30
pH	< 1 j
	7.8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name: SMBKGSB003  
Depth (feet): 3  
Sample Date: 12/02/93

Analytes	SMBKGSB003	SMBKGSB003	SMBKGSB003
	3	5	6
	12/02/93	12/02/93	12/02/93
-----			
Volatile Organic Compounds			
1,1,1-Trichloroethane	NA	< .01	< .01
1,1,2,2-Tetrachloroethane	NA	< .01	< .01
1,1,2-Trichloroethane	NA	< .01	< .01
1,1-Dichloroethane	NA	< .01	< .01
1,1-Dichloroethene	NA	< .01	< .01
-----			
1,2-Dichloroethane	NA	< .01	< .01
1,2-Dichloroethenes (cis & trans)	NA	< .01	< .01
1,2-Dichloropropane	NA	< .01	< .01
2-Chloroethylvinyl ether	NA	< .02 rrk	< .02 rrk
Acetic acid, vinyl ester	NA	< .01	< .01
-----			
Acetone	NA	< .01	< .01
Benzene	NA	< .01	< .01
Bromodichloromethane	NA	< .01	< .01
Bromoform	NA	< .01	< .01
Bromomethane	NA	< .01	< .01
-----			
Carbon disulfide	NA	< .01	< .01
Carbon tetrachloride	NA	< .01	< .01
Chlorobenzene	NA	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name: SMBKGSB003  
Depth (feet): 3  
Sample Date: 12/02/93

SMBKGSB003  
6  
12/02/93

Analytes

-----  
Volatile Organic Compounds

Chloroethane	NA	< .01	< .01
Chloroform	NA	< .01	< .01
Chloromethane	NA	< .01	< .01
Dibromochloromethane	NA	< .01	< .01
Ethylbenzene	NA	< .01	< .01

Methyl-N-butyl ketone	NA	< .01	< .01
Methylene chloride	NA	< .01	< .01
Methylethyl ketone/2-Butanone	NA	< .01	< .01
Methylisobutyl ketone	NA	< .01	< .01
Styrene	NA	< .01	< .01

Tetrachloroethene	NA	< .01	< .01
Toluene	NA	< .01	< .01
Trichloroethene	NA	< .01	< .01
Vinyl chloride	NA	< .01	< .01
Xylenes, total combined	NA	< .01	< .01

cis-1,3-Dichloropropene	NA	< .01	< .01
trans-1,3-Dichloropropene	NA	< .01	< .01

Semivolatatile Organic Compounds  
1,2,4-Trichlorobenzene

< .14

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name: Depth (feet): Sample Date:	SMBKGSB003 3 12/02/93	SMBKGSB003 5 12/02/93	SMBKGSB003 6 12/02/93
Analytes			
Semivolatile Organic Compounds			
1,2-Dichlorobenzene	NA	< .14	< .14
1,3-Dichlorobenzene	NA	< .14	< .14
1,4-Dichlorobenzene	NA	< .14	< .14
2,4,5-Trichlorophenol	NA	< .3	< .3
2,4,6-Trichlorophenol	NA	< .3	< .3
2,4-Dichlorophenol	NA	< .14	< .14
2,4-Dimethylphenol	NA	< .14	< .14
2,4-Dinitrophenol	NA	< 1.4	< 1.4
2,4-Dinitrotoluene	NA	< .14	< .14
2,6-Dinitrotoluene	NA	< .14	< .14
2-Chloronaphthalene	NA	< .14	< .14
2-Chlorophenol	NA	< .14	< .14
2-Methylnaphthalene	NA	< .14	< .14
2-Methylphenol	NA	< .14	< .14
2-Nitroaniline	NA	< .67	< .67
2-Nitrophenol	NA	< .14	< .14
3,3'-Dichlorobenzidine	NA	< .67	< .67
3-Methyl-4-chlorophenol	NA	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
<hr/>			
Analytes			
<hr/>			
Semivolatile Organic Compounds			
3-Nitroaniline	NA	< .67	< .67
4,6-Dinitro-2-cresol	NA	< 1.4	< 1.4
4-Bromophenylphenyl ether	NA	< .14	< .14
4-Chloroaniline	NA	< .3	< .3
4-Chlorophenylphenyl ether	NA	< .14	< .14
<hr/>			
4-Methylphenol	NA	< .14	< .14
4-Nitroaniline	NA	< .67	< .67
4-Nitrophenol	NA	< 1.4	< 1.4
Acenaphthene	NA	< .14	< .14
Acenaphthylene	NA	< .14	< .14
<hr/>			
Anthracene	NA	< .14	< .14
Benzo[a]anthracene	NA	< .14	< .14
Benzo[b]fluoranthene	NA	< .14	< .14
Benzo[g,h,i]perylene	NA	< .16	< .16
Benzo[k]fluoranthene	NA	< .14	< .14
<hr/>			
Benzo[a]pyrene	NA	< .14	< .14
Benzoic acid	NA	< 1.4	< 1.4
Benzyl alcohol	NA	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
Analytes			
Semivolatile Organic Compounds			
Bis (2-Ethylhexyl) phthalate	NA	< .14	< .14
Butylbenzylphthalate	NA	< .14	< .14
Carbazole	NA	< .14	< .14
Chrysene	NA	< .14	< .14
Di-N-butyl phthalate	NA	.18 b	< .14
Di-N-octyl phthalate	NA	< .14	< .14
Dibenzo[A,H]anthracene	NA	< .16	< .16
Dibenzofuran	NA	< .14	< .14
Diethylphthalate	NA	< .14	< .14
Dimethylphthalate	NA	< .14	< .14
Fluoranthene	NA	< .14	< .14
Fluorene	NA	< .14	< .14
Hexachlorobenzene	NA	< .14	< .14
Hexachlorobutadiene	NA	< .14	< .14
Hexachlorocyclopentadiene	NA	< 1	< 1
Hexachloroethane	NA	< .14	< .14
Indeno[1,2,3-C,D]pyrene	NA	< .16	< .16
Isophorone	NA	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D28.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
Analytes			
Semivolatiles Organic Compounds			
N-Nitrosodi-N-propylamine	NA	< .14	< .14
N-Nitrosodiphenylamine	NA	< .14	< .14
Naphthalene	NA	< .14	< .14
Nitrobenzene	NA	< .14	< .14
Pentachlorophenol	NA	< .67	< .67
Phenanthrene	NA	< .14	< .14
Phenol	NA	< .14	< .14
Pyrene	NA	< .14	< .14
bis (2-Chloroethoxy) methane	NA	< .14	< .14
bis (2-Chloroethyl) ether	NA	< .14	< .14
bis (2-Chloroisopropyl) ether	NA	< .14	< .14
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	NA	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	NA	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	NA	< .003	< .003
Aldrin	NA	< .003	< .003
Dieldrin	NA	< .003	< .003
Dimethoate	NA	< .033 j	< .033 j
Endosulfan sulfate	NA	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
Analytes			
Pesticides/PCBs			
Endrin	NA	< .003	< .003
Endrin aldehyde	NA	< .022	< .022
Endrin ketone	NA	< .003	< .003
Heptachlor	NA	< .003	< .003
Heptachlor epoxide	NA	< .003	< .003
Lindane	NA	< .003	< .003
Methoxychlor	NA	< .003	< .003
PCB 1016	NA	< .013	< .013
PCB 1221	NA	< .013	< .013
PCB 1232	NA	< .013	< .013
PCB 1242	NA	< .013	< .013
PCB 1248	NA	< .013	< .013
PCB 1254	NA	< .013	< .013
PCB 1260	NA	.144 C	< .013
Toxaphene	NA	< .3	< .3
alpha-Benzenehexachloride	NA	< .003	< .003
alpha-Chlordane	NA	< .003	< .003
alpha-Endosulfan/Endosulfan I	NA	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
Analytes			
Pesticides/PCBs			
beta-Benzenhexachloride	NA	< .003	< .003
beta-Endosulfan/Endosulfan II	NA	< .003	< .003
delta-Benzenhexachloride	NA	< .003	< .003
gamma-Chlordane	NA	< .003	< .003
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	NA	< .01 j	< .01 j
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	< .01	< .01
245T	NA	< .01	< .01
245TP	NA	< .01	< .01
Dalapon	NA	< .01	< .01
Dicamba	NA	< .01 rr	< .01
Dichloroprop	NA	< .01	< .01
Dinoseb	NA	< .01	< .01
MCPA	NA	< .2	< .2
MCPB	NA	< .2	< .2
Metals			
Aluminum	NA	9840 j	11500 j
Antimony	NA	< 5 j/j	< 5 j/j
Arsenic	NA	3.48 j	2.12 j
Barium	NA	56.4	62.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
Analytes			
Metals			
Beryllium	NA	< .5	< .5
Boron	NA	15.6	12.5
Cadmium	NA	< .5	< .5
Calcium	NA	120000	45000
Chromium	NA	13.2	15
Cobalt	NA	7.2	4.25
Copper	NA	15.6	18.8
Cyanide	NA	< .25	< .25
Iron	NA	10700	13800
Lead	NA	7.8	11.1
Magnesium	NA	30000	16300
Manganese	NA	396	150
Mercury	NA	< .1	< .1
Nickel	NA	18	15
Potassium	NA	1680	1250
Selenium	NA	< .25 J	< .25 J
Silver	NA	< .5	< .5
Sodium	NA	288	200

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2B.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB003

Sample Name:	SMBKGSB003	SMBKGSB003	SMBKGSB003
Depth (feet):	3	5	6
Sample Date:	12/02/93	12/02/93	12/02/93
-----			
Analytes			
-----			
Metals			
Thallium	NA	30	22.5
Vanadium	NA	21.6	27.5
Zinc	NA	44.4	55
-----			
Landfill Parameters			
Ammonia	24	bj	28.6 bj
Chloride	NA	< 5	< 5
Fluoride	NA	< 2.5	< 2.5
Nitrite, Nitrate -- Non-Specific	NA	1.63	.521 b
Sulfate	NA	< 25	< 25
-----			
Total Organic Carbon	NA	24	31
Total recoverable phenolics	NA	< 1	1.74 b
pH	NA	8	8 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name: SMBKGSB004  
Depth (feet): 1.5  
Sample Date: 11/22/93

SMBKGSB004  
3  
11/22/93  
6.5  
11/22/93

Analytes

-----  
Volatile Organic Compounds

1,1,1-Trichloroethane	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01

1,2-Dichloroethane  
1,2-Dichloroethenes (cis & trans)  
1,2-Dichloropropane

2-Chloroethylvinyl ether	< .01 j	< .01 j	< .01 j
Acetic acid, vinyl ester	< .01	< .01	< .01

Acetone  
Benzene  
Bromodichloromethane  
Bromoform  
Bromomethane

Carbon disulfide	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name: SMBKGSB004  
Depth (feet): 1.5  
Sample Date: 11/22/93

SMBKGSB004  
3  
11/22/93

SMBKGSB004  
6.5  
11/22/93

Analytes

-----  
Volatile Organic Compounds

Chloroethane	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01

Methyl-N-butyl ketone	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01
Styrene	< .01	< .01	< .01

Tetrachloroethene	< .01	< .01	< .01
Toluene	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01

cis-1,3-Dichloropropene	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene	< .14	< .14	< .14
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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name:	SMBKGSB004	SMBKGSB004	SMBKGSB004
Depth (feet):	1.5	3	6.5
Sample Date:	11/22/93	11/22/93	11/22/93
<hr/>			
Analytes			
<hr/>			
Semivolatile Organic Compounds			
1,2-Dichlorobenzene	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3
<hr/>			
2,4-Dichlorophenol	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14 j	< .14 j	< .14 j
2,6,10,14-Tetramethylpentadecane	.36 S	NA	NA
<hr/>			
2,6-Dinitrotoluene	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14
<hr/>			
2-Nitroaniline	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67 j	< .67 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name:	SMBKGSB004	SMBKGSB004	SMBKGSB004
Depth (feet):	1.5	3	6.5
Sample Date:	11/22/93	11/22/93	11/22/93
<hr/>			
Analytes			
<hr/>			
Semivolatile Organic Compounds			
3-Methyl-4-chlorophenol	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 j
<hr/>			
4-Chlorophenylphenyl ether	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14
<hr/>			
Acenaphthylene	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14
Benzo[A]anthracene	.18	< .14	< .14
Benzo[B]fluoranthene	.17 Pj	< .14	< .14
Benzo[G,H,I]perylene	< .16 j	< .16	< .16
<hr/>			
Benzo[K]fluoranthene	< .14 j	< .14	< .14
Benzo[a]pyrene	.17 Pj	< .14	< .14
Benzoic acid	< 1.4 j	< 1.4 j	< 1.4 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name:	SMBKGSB004	SMBKGSB004	SMBKGSB004
Depth (feet):	1.5	3	6.5
Sample Date:	11/22/93	11/22/93	11/22/93
Analytes			
-----			
Semivolatile Organic Compounds			
Benzyl alcohol	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	< .14	< .14	< .14
Butylbenzylphthalate	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14
Chrysene	.2	< .14	< .14
Di-N-butyl phthalate	.25	.23	.23
Di-N-octyl phthalate	< .14 j	< .14	< .14
Dibenzo[A,H]anthracene	< .16 j	< .16	< .16
Dibenzofuran	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14 R
Dimethylphthalate	< .14	< .14	< .14
Fluoranthene	.34	< .14	< .14
Fluorene	< .14	< .14	< .14
Hexachlorobenzene	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name: SMBKGSB004 SMBKGSB004 SMBKGSB004  
Depth (feet): 1.5 3 6.5  
Sample Date: 11/22/93 11/22/93 11/22/93

Analytes

Semivolatile Organic Compounds

Isophorone < .14 < .14 < .14  
N-Nitrosodi-N-propylamine < .14 < .14 < .14  
N-Nitrosodiphenylamine < .14 < .14 < .14  
Naphthalene < .14 < .14 < .14  
Nitrobenzene < .14 < .14 < .14

Pentachlorophenol < .67 < .67 < .67  
Pentadecane NA NA .33 S  
Phenanthrene .28 < .14 < .14  
Phenol < .14 < .14 < .14  
Pyrene .31 < .14 < .14

bis (2-Chloroethoxy) methane < .14 < .14 < .14  
bis (2-Chloroethyl) ether < .14 < .14 < .14  
bis (2-Chloroisopropyl) ether < .14 < .14 < .14

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .003 < .003 < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .003 < .003 < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene < .003 < .003 < .003  
Aldrin < .003 < .003 < .003  
Dieldrin < .003 < .003 < .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name: SMBKGSB004 SMBKGSB004 SMBKGSB004  
Depth (feet): 1.5 3 6.5  
Sample Date: 11/22/93 11/22/93 11/22/93

Analytes

Pesticides/PCBs

Dimethoate < .033 < .033 < .033  
Endosulfan sulfate < .003 < .003 < .003  
Endrin < .003 < .003 < .003  
Endrin aldehyde < .022 < .022 < .022  
Endrin ketone < .003 < .003 < .003

Heptachlor

Heptachlor epoxide < .003 < .003 < .003  
Lindane < .003 < .003 < .003  
Methoxychlor < .003 < .003 < .003  
PCB 1016 < .013 < .013 < .013

PCB 1221

PCB 1232 < .013 < .013 < .013  
PCB 1242 < .013 < .013 < .013  
PCB 1248 < .013 < .013 < .013  
PCB 1254 < .013 < .013 < .013

PCB 1260

Toxaphene < .013 < .013 < .013  
alpha-Benzenhexachloride < .3 < .3 < .3

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name:	SMBKGSB004	SMBKGSB004	SMBKGSB004
Depth (feet):	1.5	3	6.5
Sample Date:	11/22/93	11/22/93	11/22/93
Analytes			
Pesticides/PCBs			
alpha-Chlordane	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01
245T	< .01	< .01	< .01
245TP	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01
MCPA	< .2	< .2	< .2
MCPP	< .4 K	< .4 K	< .4 K
Metals			
Aluminum	6630	12600	4850
Antimony	< 5 J	< 5 J	< 5 J

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name:	SMBKGSB004	SMBKGSB004	SMBKGSB004
Depth (feet):	1.5	3	6.5
Sample Date:	11/22/93	11/22/93	11/22/93
Analytes			
-----			
Metals			
Arsenic	4.2	rr	3.9 rr
Barium	76		< 39.8
Beryllium	< .5		< .5
Boron	12.1		13.2
Cadmium	< .5		< .5
Calcium	35000		103000
Chromium	13.3	j	8.05 j
Cobalt	7		3.86
Copper	15.7		13.2
Cyanide	< .25		< .25
Iron	15700		11000
Lead	26.5		< 5
Magnesium	14500		26500
Manganese	712		243
Mercury	< .1		< .1
Nickel	14.5		13.2
Potassium	579		1210
Selenium	< .25	rr/NJ	< .25 rr/NJ

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2C.  
Background Subsurface Soil Samples Analytical Results  
Site SMBKGSB004

Sample Name: SMBKGSB004  
Depth (feet): 1.5  
Sample Date: 11/22/93

Analytes	SMBKGSB004	SMBKGSB004	SMBKGSB004
	1.5	3	6.5
	11/22/93	11/22/93	11/22/93
<b>Metals</b>			
Silver	< .5	< .5	< .5
Sodium	434	316	375
Thallium	13.3	< 10	22.1
Vanadium	20.5 j	34.1 j	14.3 j
Zinc	61.5	68.2	38.6
<b>Landfill Parameters</b>			
Ammonia	104 j	25.4 bj	< 6.25 bj
Chloride	7.76	< 5 j	< 5 j
Fluoride	3.72 b	6.81 bj	< 2.5 j
Nitrite, Nitrate -- Non-Specific	2.41	1.88	.289 b
Sulfate	< 25	< 25 j	< 25 j
Total Organic Carbon	37	3.2	37
Total recoverable phenolics	2.32 j	< 1	< 1
pH	7.4	7.6	8

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB005 1.5 11/21/93	SMBKGSB005 11.5 11/21/93	SMBKGSB005 2.5 11/21/93	SMBKGSB005 5.5 11/21/93	SMBKGSB005 8.5 11/21/93
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2b.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB005 1.5 11/21/93	SMBKGSB005 11.5 11/21/93	SMBKGSB005 2.5 11/21/93	SMBKGSB005 5.5 11/21/93	SMBKGSB005 8.5 11/21/93
Analytes					
-----					
Volatiles Organic Compounds					
Chloroethane	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .01
Methylene chloride	< .01 j	< .01 j	< .01 j	< .01 j	< .01 j
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
o,p-Xylene	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005
Depth (feet):	1.5	11.5	2.5	5.5	8.5
Sample Date:	11/21/93	11/21/93	11/21/93	11/21/93	11/21/93
Analytes	NA	NA	NA	NA	NA
Semivolatle Organic Compounds					
1,1,3-Trimethylcyclohexane	< .14	< .14	< .14	< .14	< .14
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14 j	< .14 j	< .14 j	< .14 j	< .14 j
2,6,10,14-Tetramethylpentadecane	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2b.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB005 1.5 11/21/93	SMBKGSB005 11.5 11/21/93	SMBKGSB005 2.5 11/21/93	SMBKGSB005 5.5 11/21/93	SMBKGSB005 8.5 11/21/93
Analytes					
Semivolatiles Organic Compounds					
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< .14	< .14	< .14	< .14	< .14
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< .14	< .14	< .14	< .14	< .14
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo [A] anthracene	< .14	< .14	< .14	< .14	< .14
Benzo [B] fluoranthene	< .14 j	< .14	< .14	< .14 j	< .14
Benzo [G,H,I] perylene	< .16 j	< .16	< .16	< .16 j	< .16
Benzo [K] fluoranthene	< .14 j	< .14	< .14	< .14 j	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB005 1.5 11/21/93	SMBKGSB005 11.5 11/21/93	SMBKGSB005 2.5 11/21/93	SMBKGSB005 5.5 11/21/93	SMBKGSB005 8.5 11/21/93
<hr/>					
Analytes					
<hr/>					
Semivolatiles Organic Compounds					
Benzo[a]pyrene	< .14 j	< .14	< .14	< .14 j	< .14
Benzoic acid	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14 R
Bis (2-Ethylhexyl) phthalate	< .14	3	< .14	< .14	< .14
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14 R
Chrysene	< .14	< .14	< .14	< .14	< .14
Decane	NA	.34 S	NA	NA	NA
Di-N-butyl phthalate	< .14	.23	.18	.32	.3
Di-N-octyl phthalate	< .14 j	< .14	< .14	< .14 j	< .14
Dibenzo[A,H]anthracene	< .16 j	< .16	< .16	< .16 j	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14 R	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Heptadecane	NA	.45 S	NA	NA	NA
Heptadecane	NA	.89 S	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005
Depth (feet):	1.5	11.5	2.5	5.5	8.5	
Sample Date:	11/21/93	11/21/93	11/21/93	11/21/93	11/21/93	11/21/93
<hr/>						
Analytes						
<hr/>						
Semivolatile Organic Compounds						
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14	< .14
Hexadecane	NA	.78 S	NA	NA	NA	NA
<hr/>						
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14	< .14
<hr/>						
Nitrobenzene	< .14	< .14	< .14	< .14	< .14	< .14
Nonane	NA	NA	NA	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67	< .67	< .67	< .67
Pentadecane	NA	NA	NA	NA	NA	NA
Phenanthrene	< .14	< .14	< .14	< .14	< .14	< .14
<hr/>						
Phenol	< .14	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	< .14	< .14
Tetradecane	NA	1 S	NA	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D20.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB005 1.5 11/21/93	SMBKGSB005 11.5 11/21/93	SMBKGSB005 2.5 11/21/93	SMBKGSB005 5.5 11/21/93	SMBKGSB005 8.5 11/21/93
Analytes	NA	.89	NA	NA	NA
Semivolatile Organic Compounds					
Tridecane	NA	< .14	< .14	< .14	< .14
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14	< .14
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003
Dimethoate	< .033	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005
Depth (feet):	1.5	11.5	2.5	5.5	8.5
Sample Date:	11/21/93	11/21/93	11/21/93	11/21/93	11/21/93
Analytes					
Pesticides/PCBs					
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D2b.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB005 1.5 11/21/93	SMBKGSB005 11.5 11/21/93	SMBKGSB005 2.5 11/21/93	SMBKGSB005 5.5 11/21/93	SMBKGSB005 8.5 11/21/93
Analytes					
Herbicides					
245TP	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCP	< .4 K	< .4 K	< .4 K	< .4 K	< .4 K
Metals					
Aluminum	10300	4250	7200	5800	5310
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	5.9 rr	5 rr	5.5 rr	5.1 rr	4.5 rr
Barium	68.6	< 39.8	44.3	46.6	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	15.4	9.06	10.9	11.4	9.83
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	84000	107000	69800	96700	90400
Chromium	15.4 j	7.61 j	12.2 j	9.1 j	9.27 j
Cobalt	7.22	6.38	4.65	6.26	4.63
Copper	16.6	14.5	10.2	13.7	13.6

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005
Depth (feet):	1.5	11.5	2.5	5.5	8.5
Sample Date:	11/21/93	11/21/93	11/21/93	11/21/93	11/21/93
Analytes					
-----					
Metals					
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	16600	10500	14400	12500	12400
Lead	6.98	< 5	< 5	< 5	6.44
Magnesium	28400	29100	22100	31900	29400
Manganese	414	280	244	353	215
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	21.3	15.7	14.4	18.2	14.7
Potassium	1660	951	1110	1250	1100
Selenium	< .25	rr/NJ	< .25	rr/NJ	< .25
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	391	358	377	341	362
Thallium	20.1	20.1	17.7	19.3	23.7
Vanadium	24.9	10.4	17.7	14.8	13.6
Zinc	45	34.7	37.7	43.2	45.2
Landfill Parameters					
Ammonia	< 6.25	< 6.25	< 6.25	< 6.25	91.9
Chloride	< 5	< 5	< 5	< 5	27.7
Fluoride	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Nitrite, Nitrate -- Non-Specific	.493	.451	.559	.423	.818

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005	SMBKGSB005
Depth (feet):	1.5	11.5	2.5	5.5	8.5
Sample Date:	11/21/93	11/21/93	11/21/93	11/21/93	11/21/93
Analytes					
Landfill Parameters					
Sulfate	70.4	63	41.1	< 25	< 25
Total Organic Carbon	47	44	31	37	41
Total recoverable phenolics	1.25 bj	< 1	< 1	< 1	< 1
pH	7.7	7.9	8	8	8.1

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB006 1 11/19/93	SMBKGSB006 13.5 11/19/93	SMBKGSB006 2.5 11/19/93	SMBKGSB006 6.5 11/19/93	SMBKGSB006 9.5 11/19/93
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01 j	< .01 j	< .01 j	< .01 j	< .01 j
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01 R	< .01 R	< .01 R	< .01 R	< .01 R
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006
Depth (feet):	1	13.5	2.5	6.5	9.5
Sample Date:	11/19/93	11/19/93	11/19/93	11/19/93	11/19/93
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01 j	< .01 j	< .01 j	< .01 j	< .01 j
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	< .01	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
o,p-Xylene	< .01 R	< .01 R	< .01 R	< .01 R	< .01 R
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006
Depth (feet):	1	13.5	2.5	6.5	9.5
Sample Date:	11/19/93	11/19/93	11/19/93	11/19/93	11/19/93
Analytes	NA	NA	NA	NA	S
Semivolatile Organic Compounds					
1,1,3-Trimethylcyclohexane	< .14	< .14	< .14	< .14	< .14
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .3	< .3	< .3	< .3	< .3
2,4,5-Trichlorophenol	< .3 j	< .3 j	< .3 j	< .3 j	< .3 j
2,4,6-Trichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrotoluene	NA	.43 S	NA	NA	.78 S
2,6,10,14-Tetramethylpentadecane	< .14	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB006 1 11/19/93	SMBKGSB006 13.5 11/19/93	SMBKGSB006 2.5 11/19/93	SMBKGSB006 6.5 11/19/93	SMBKGSB006 9.5 11/19/93
Analytes					
Semivolatile Organic Compounds					
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4 j	< 1.4 j	< 1.4	< 1.4 j	< 1.4 j
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB006 1 11/19/93	SMBKGSB006 13.5 11/19/93	SMBKGSB006 2.5 11/19/93	SMBKGSB006 6.5 11/19/93	SMBKGSB006 9.5 11/19/93
Analytes					
Semi-volatile Organic Compounds					
Benzo[a]pyrene	< .14	< .14	< .14	< .14	< .14
Benzoic acid	< 1.4 J	< 1.4 J	< 1.4 J	< 1.4 J	< 1.4 J
Benzyl alcohol	< .14 R	< .14 R	< .14 R	< .14 R	< .14 R
Bis (2-Ethylhexyl) phthalate	< .14	.15 P	< .14	< .14	< .14
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14 R	< .14 R	< .14 R	< .14 R	< .14 R
Chrysene	< .14	< .14	< .14	< .14	< .14
Decane	NA	NA	NA	NA	.67 S
Di-N-butyl phthalate	< .14	< .14	< .14	< .14	< .14
Di-N-octyl phthalate	< .14 J	< .14 J	< .14 J	< .14 J	< .14 J
Dibenzo[a,h]anthracene	< .16	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14 R	< .14 R	< .14 R	< .14 R	< .14 R
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Heptadecane	NA	NA	NA	NA	NA
Heptadecane	NA	.32 S	NA	NA	.78 S

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB006 1 11/19/93	SMBKGSB006 13.5 11/19/93	SMBKGSB006 2.5 11/19/93	SMBKGSB006 6.5 11/19/93	SMBKGSB006 9.5 11/19/93
Analytes					
Semivolatile Organic Compounds					
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14
Hexadecane	NA	.32 S	NA	NA	NA
Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14
Nonane	NA	NA	NA	NA	.56 S
Pentachlorophenol	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
Pentadecane	NA	NA	NA	NA	.67 S
Phenanthrene	< .14	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	< .14
Tetradecane	NA	NA	NA	NA	.78 S

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: SMBKGSB006 SMBKGSB006 SMBKGSB006 SMBKGSB006 SMBKGSB006  
Depth (feet): 1 13.5 2.5 6.5 9.5  
Sample Date: 11/19/93 11/19/93 11/19/93 11/19/93 11/19/93

## Analytes

## Semivolatile Organic Compounds

Analyte	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006
Tridecane	NA	NA	NA	NA	.67 S
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 j	< .14 j	< .14 j	< .14 j	< .14 j

## Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003

Dimethoate	< .033 rr	< .033 j	< .033 rr	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003

Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D20.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB006 1 11/19/93	SMBKGSB006 13.5 11/19/93	SMBKGSB006 2.5 11/19/93	SMBKGSB006 6.5 11/19/93	SMBKGSB006 9.5 11/19/93
Analytes					
Pesticides/PCBs					
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01
245T	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2b.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006
Depth (feet):	1	13.5	2.5	6.5	9.5
Sample Date:	11/19/93	11/19/93	11/19/93	11/19/93	11/19/93
Analytes					
-----					
Herbicides					
245TP	< .01 /J	< .01 /J	< .01 /J	< .01 /J	< .01 /J
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2	< .2
Metals					
Aluminum	10100	2380	5380	4380	3910
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	6.1 rr	2.2 rr	5.6 rr	5.6 rr	3.9 rr
Barium	65.6	< 39.8	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	6.44	7.56	10.2	7.3	7.92
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	2670	63700	107000	88800	89300
Chromium	15.8 j	5.08 j	8.52 j	8.43 j	7.25 j
Cobalt	10.9	3.24	4.26	4.72	4.91
Copper	15.8	7.99	13.5	13.5	12.3

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB006 1 11/19/93	SMBKGSB006 13.5 11/19/93	SMBKGSB006 2.5 11/19/93	SMBKGSB006 6.5 11/19/93	SMBKGSB006 9.5 11/19/93
Analytes					
Metals					
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	19400	6160	11200	11200	8930
Lead	15.8	< 5	< 5	< 5	< 5
Magnesium	2790	19400	30300	25800	25700
Manganese	522	140	224	225	346
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	19.4	8.64	14.6	14.6	13.4
Potassium	693	572	796	764	804
Selenium	< .25	rr/NJ	< .25	rr/NJ	< .25
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	267	324	404	337	368
Thallium	< 10	24.8	22.4	24.7	22.3
Vanadium	26.7	j	12.3	11.2	9.6
Zinc	53.5	23.8	41.5	40.4	32.4
Landfill Parameters					
Ammonia	7.92	b	< 6.25	b	< 6.25
Chloride	< 5	j	< 5	j	< 5
Fluoride	7.13	rr	< 2.5	rr	< 2.5
Nitrite, Nitrate -- Non-Specific	.549	b	.454	bj	.326

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006	SMBKGSB006
Depth (feet):	1	13.5	2.5	6.5	9.5
Sample Date:	11/19/93	11/19/93	11/19/93	11/19/93	11/19/93
Analytes					
Landfill Parameters					
Sulfate	< 25 j	< 25	< 25 j	< 25	28.6
Total Organic Carbon	14	47	47	39	47
Total recoverable phenolics	< 1	< 1	< 1	< 1	< 1
pH	7.6 j	8.8 j	8.8 rr	8.9 rr	8.8 rr

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94
-----			
Analytes			
-----			
Volatile Organic Compounds			
1,1,1-Trichloroethane	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01
-----			
1,2-Dichloroethane	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01 j	< .01 j	< .01 j
-----			
Acetone	< .01	< .01	< .01
Benzene	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01
-----			
Carbon disulfide	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB007 11 02/08/94	SMBKGSB007 14 02/08/94	SMBKGSB007 9 02/08/94
Analytes			
-----			
Volatiles Organic Compounds			
Chloroethane	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01
Methylene chloride	.015 b	.014 b	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01
Styrene	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01
Toluene	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01
o,p-Xylene	NA	NA	NA
trans-1,3-Dichloropropene	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94

Analytes

Semivolatile Organic Compounds

1,1,3-Trimethylcyclohexane	NA	NA	NA
1,2,4-Trichlorobenzene	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14	< .14
2,6,10,14-Tetramethylpentadecane	NA	NA	NA
2,6-Dinitrotoluene	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94
-----			
Analytes			
-----			
Semivolatile Organic Compounds			
2-Nitrophenol	< .14	< .14	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67 j	< .67 j
3-Methyl-4-chlorophenol	< .14	< .14	< .14
3-Nitroaniline	< .67	< .67	< .67
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14 j	< .14 j	< .14 j

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB007 11 02/08/94	SMBKGSB007 14 02/08/94	SMBKGSB007 9 02/08/94
Analytes			
Semivolatile Organic Compounds			
Benzof[a]pyrene	< .14	< .14	< .14
Benzoic acid	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	.17
Bis (2-Ethylhexyl) phthalate	1.2 Bb	1.5 Bb	200 B
Butylbenzylphthalate	< .14	< .14	.91
Carbazole	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14
Decane	NA	NA	NA
Di-N-butyl phthalate	.26 b	2.4 b	60
Di-N-octyl phthalate	< .14	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14
Fluoranthene	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14
Heptadecane	NA	NA	NA
Heptadecane	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94

Analytes

Semivolatiles Organic Compounds

Hexachlorobenzene	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14
Hexadecane	NA	NA	NA

Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14

Nitrobenzene	< .14	< .14	< .14
Nonane	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67
Pentadecane	NA	NA	NA
Phenanthrene	< .14	< .14	< .14

Phenol	< .14	< .14	.23
Pyrene	< .14	< .14	< .14
Tetradecane	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: SMBKGSB007 SMBKGSB007 SMBKGSB007  
Depth (feet): 11 14 9  
Sample Date: 02/08/94 02/08/94 02/08/94

Analytes

Semivolatile Organic Compounds

Analyte	SMBKGSB007	SMBKGSB007	SMBKGSB007
Tridecane	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 j	< .14 j	< .14 j

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003

Dimethoate

Endosulfan sulfate	< .003 j	< .003 j	< .003 j
Endrin	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003

Heptachlor

Heptachlor epoxide	< .003	< .003	< .003
Lindane	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2b.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name: Depth (feet): Sample Date:	SMBKGSB007 11 02/08/94	SMBKGSB007 14 02/08/94	SMBKGSB007 9 02/08/94
Analytes			
Pesticides/PCBs			
PCB 1016	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01
245T	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94

Analytes

Herbicides

245TP	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01

MCPA  
MCPB

< .2	< .2	< .2
< .2	< .2	< .2

Metals

Aluminum	2900	3830	3510
Antimony	< 5 j	< 5 j	< 5 j
Arsenic	6.87 j	13 j	7.35 j
Barium	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5

Boron  
Cadmium  
Calcium  
Chromium  
Cobalt

8.15	7.99	10.2
< .5	< .5	< .5
110000	101000	210000
5.79	13.8	8.09
2.79	3.41	2.56

Copper

9.05

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94

Analytes

Metals

Cyanide	< .25	< .25	< .25
Iron	7940	11700	7140
Lead	< 5	7.14	< 5
Magnesium	42900	37300	33000
Manganese	279	277	437
Mercury	< .1	< .1	< .1
Nickel	8.05	14.9	11.7
Potassium	676	884	650
Selenium	< .25	< .25	< .25
Silver	< .5	< .5	< .5
Sodium	429	469	501
Thallium	< 10	14.9	< 10
Vanadium	10.2	12.8	9.37
Zinc	25.8	31.9	27.7

Landfill Parameters

Ammonia	12.3	10.5	11.1
Chloride	13.9	71.9	< 5
Fluoride	< 2.5	2.86	< 2.5
Nitrite, Nitrate -- Non-Specific	< .2	< .2	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2D.  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB005, SMBKGSB006 and SMBKGSB007

Sample Name:	SMBKGSB007	SMBKGSB007	SMBKGSB007
Depth (feet):	11	14	9
Sample Date:	02/08/94	02/08/94	02/08/94

Analytes

Landfill Parameters

Sulfate	< 25	< 25	< 25
Total Organic Carbon	49000 j	58000 j	41000 j
Total recoverable phenolics	< 1	< 1	< 1
pH	8.4 rr	8.4 rr	8.6 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94
<b>Analytes</b>					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
-----					
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
-----					
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
-----					
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB010 1.5 02/09/94	SMBKGSB010 11 02/09/94	SMBKGSB010 12.5 02/09/94	SMBKGSB010 15.5 02/09/94	SMBKGSB010 18.5 02/09/94
Analytes					
-----					
Volatiles Organic Compounds					
Chlorobenzene	< .01	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01 j	< .01	< .01	< .01
Methylene chloride	< .01	< .01 j	< .01	.012	< .01
Methylethyl ketone/2-Butanone	< .01	< .01 j	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Trichlorofluoromethane	NA	.0057 S	NA	NA	NA
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94

Analytes

Volatiles Organic Compounds

trans-1,3-Dichloropropene

< .01

< .01

< .01

< .01

< .01

< .01

< .01

< .01

< .01

Semivolatiles Organic Compounds

1,2,4-Trichlorobenzene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

1,2-Dichlorobenzene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

1,3-Dichlorobenzene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

1,4-Dichlorobenzene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2,4,5-Trichlorophenol

< .3

< .3

< .3

< .3

< .3

< .3

< .3

< .3

< .3

2,4,6-Trichlorophenol

< .3

< .3

< .3

< .3

< .3

< .3

< .3

< .3

< .3

2,4-Dichlorophenol

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2,4-Dimethylphenol

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2,4-Dinitrophenol

< 1.4

< 1.4

< 1.4

< 1.4

< 1.4

< 1.4

< 1.4

< 1.4

< 1.4

2,4-Dinitrotoluene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2,6-Dinitrotoluene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2-Chloronaphthalene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2-Chlorophenol

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2-Methylnaphthalene

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2-Methylphenol

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

2-Nitroaniline

< .67

< .67

< .67

< .67

< .67

< .67

< .67

< .67

< .67

2-Nitrophenol

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94
Analytes					
-----					
Semivolatle Organic Compounds					
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 /K	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4 j	< 1.4 /K	< 1.4 j	< 1.4 j
4-Bromophenylphenyl ether	< .14	< .14	< .14 /K	< .14	< .14
4-Chloroaniline	< .3	< .3 j	< .3 j/K	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14 /K	< .14	< .14
4-Methylphenol	< .14	< .14	< .14 /K	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67 /K	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4 /K	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14 /K	< .14	< .14
Acenaphthylene	< .14	< .14	< .14 /K	< .14	< .14
Anthracene	< .14	< .14	< .14 /K	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14 /K	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14 /K	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16 j	< .16 /K	< .16 j	< .16 j
Benzo[K]fluoranthene	< .14	< .14	< .14 /K	< .14	< .14
Benzo[a]pyrene	< .14	< .14	< .14 /K	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94

Analytes

Semivolatile Organic Compounds

Benzoic acid	< .14	< .14	< .14 /K	< .14	< .14
Benzyl alcohol	< .14	< .14	< .14 /K	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.27 Bb	.33 Bb	< .14 /K	< .14	.81 Bb
Butylbenzylphthalate	< .14	< .14	< .14 /K	< .14	< .14
Carbazole	< .14	< .14	< .14 /K	< .14	< .14
Chrysene	< .14	< .14	< .14 /K	< .14	< .14
Di-N-butyl phthalate	< .14	.2	< .14 /K	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14 /K	< .14	< .14
Dibenzo[A,H]anthracene	< .16	< .16	< .16 /K	< .16	< .16
Dibenzofuran	< .14	< .14	< .14 /K	< .14	< .14
Diethylphthalate	< .14	< .14	< .14 /K	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14 /K	< .14	< .14
Docosane	NA	NA	NA	NA	NA
Dodecane	NA	NA	NA	.55 S	.67 S
Eicosane	NA	NA	NA	NA	.33 S
Fluoranthene	< .14	< .14	< .14 /K	< .14	< .14
Fluorene	< .14	< .14	< .14 /K	< .14	< .14
Heptacosane	NA	NA	NA	NA	.33 S

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5	
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94
Analytes						
-----						
Semivolatile Organic Compounds						
Heptadecane	NA	NA	NA	NA	NA	.56 S
Hexachlorobenzene	< .14	< .14	< .14 /K	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14 /K	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1 j	< 1 /K	< 1 j	< 1 j	< 1 j
Hexachloroethane	< .14	< .14	< .14 /K	< .14	< .14	< .14
-----						
Hexadecane	NA	NA	NA	.33	.45	S
Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .16 /K	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14 /K	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14 /K	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14 /K	< .14	< .14	< .14
-----						
Naphthalene	< .14	< .14	< .14 /K	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14 /K	< .14	< .14	< .14
Nonadecane	NA	NA	NA	.33	.33	S
Octadecane	NA	NA	NA	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67 /K	< .67	< .67	< .67
-----						
Phenanthrene	< .14	< .14	< .14 /K	< .14	< .14	< .14
Phenol	< .14	< .14	< .14 /K	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14 /K	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94
Analytes					
-----					
Semivolatile Organic Compounds					
Tetradecane	NA	NA	NA	.44 S	.56 S
Tridecane	NA	NA	NA	.33 S	.45 S
bis (2-Chloroethoxy) methane	< .14	< .14	< .14 /K	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14 /K	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14 /K	< .14	< .14
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003
Dimethoate	< .033 rr	< .033 rr	< .033 rr	< .033 rr	< .033 rr
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB010 1.5 02/09/94	SMBKGSB010 11 02/09/94	SMBKGSB010 12.5 02/09/94	SMBKGSB010 15.5 02/09/94	SMBKGSB010 18.5 02/09/94
Analytes					
Pesticides/PCBs					
Methoxychlor	< .003	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94

-----  
Analytes

Herbicides

245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01

Dinoseb

Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCP	< .2	< .2	< .2	< .2	< .2

Metals

Aluminum	8030	2160	2250	3440	4570
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	3.65	4.5	9	6.7	4.5
Barium	< 39.8	< 39.8	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	< 5	8.52	6.52	7.76	13.4
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	2310	102000	103000	94200	110000
Chromium	9.49	4.2	4.95	5.99	6.57
Cobalt	7.66	< 2	< 2	3.66	3.23

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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94

Analytes

Metals

Copper	4.99	9.2	9.79	13.3	10.7
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	9250	5680	7420	8760	8240
Lead	10.7	< 5	< 5	< 5	< 5
Magnesium	1820	19300	21400	26600	25600
Manganese	207	170	225	288	267
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	8.03	6.93	8.55	10.9	10.6
Potassium	584	489	506	710	1010
Selenium	.341 rr	< .25 rr	.315 rr	.31 rr	< .25 rr
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	353	466	405	388	445
Thallium	< 10	< 10	< 10	< 10	< 10
Vanadium	19.5	6.02	6.75	8.54	10.4
Zinc	30.4	23.9	30.4	39.9	31.2

Landfill Parameters

Ammonia	39.3 j	< 6.25 j	< 6.25 j	< 6.25 j	8.64 bj
Chloride	< 5	< 5	< 5	< 5	< 5
Fluoride	5.32 b	< 2.5	< 2.5	< 2.5	< 2.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010	SMBKGSB010
Depth (feet):	1.5	11	12.5	15.5	18.5
Sample Date:	02/09/94	02/09/94	02/09/94	02/09/94	02/09/94
Analytes					
-----					
Landfill Parameters					
Nitrite, Nitrate -- Non-Specific	.657 j	< .2 j	< .2 j	< .2 j	.295 j
Sulfate	< 25	< 25	< 25	64.3	138
Total Organic Carbon	3200 j	36000 j	46000 j	35000 j	38000 j
Total recoverable phenolics	< 1	< 1	< 1	< 1	< 1
pH	7.9 j	8.6 j	8.7 j	8.5 j	8.5 j

Notes: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94
<hr/>					
Analytes					
<hr/>					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichlor-1,2,2-trifluoroethane	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
<hr/>					
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
<hr/>					
Acetic acid, vinyl ester	< .01	< .01	< .01 j	< .01 j	< .01
Acetone	< .01	< .01	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
<hr/>					
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94
Analytes					
-----					
Volatile Organic Compounds					
Chlorobenzene	< .01	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01 j	< .01	< .01	< .01
Methylene chloride	< .01	< .01 j	.015 b	.015 b	< .01
Methylethyl ketone/2-Butanone	< .01	< .01 j	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Trichlorofluoromethane	NA	NA	NA	NA	NA
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB010 2 02/09/94	SMBKGSB010 7.5 02/09/94	SMBKGSB011 11 02/08/94	SMBKGSB011 14 02/08/94	SMBKGSB011 19.5 02/08/94
Analytes					
-----					
Volatile Organic Compounds					
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4	< 1.4	< 1.4 j	< 1.4 j	< 1.4 j
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94

Analytes

Semivolatile Organic Compounds

3,3'-Dichlorobenzidine	< .67	< .67	< .67 j	< .67 j	< .67 j
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3 j	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67 j	< .67 j	< .67 j
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo [A] anthracene	< .14	< .14	< .14	< .14	< .14
Benzo [B] fluoranthene	< .14	< .14	< .14	< .14	< .14
Benzo [G,H,I] perylene	< .16	< .16	< .16	< .16	< .16
Benzo [K] fluoranthene	< .14	< .14	< .14 j	< .14	< .14
Benzo [a] pyrene	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94
<hr/>					
Analytes					
<hr/>					
Semivolatile Organic Compounds					
Benzoic acid	< .14	< .14	< .14	< .14	< .14
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.24 Bb	.21 Bb	6.8 B	< .14	.26 Bb
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	< .14	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14	< .14
Dibenzof[a,h]anthracene	< .16	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Docosane	NA	NA	NA	NA	NA
Dodecane	NA	NA	NA	NA	NA
Eicosane	NA	NA	NA	NA	NA
Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Heneicosane	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGS08A, SMBKGS09A, SMBKGS010, and SMBKGS011

Sample Name:	SMBKGS010	SMBKGS010	SMBKGS011	SMBKGS011	SMBKGS011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94

## Analytes

## Semi-volatile Organic Compounds

Heptadecane	NA	NA	NA	NA	NA
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14
Hexadecane	NA	NA	NA	NA	NA
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14
Nonadecane	NA	NA	NA	NA	NA
Octadecane	NA	NA	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94
Analytes					
-----					
Semivolatile Organic Compounds					
Tetradecane	NA	NA	NA	NA	NA
Tridecane	NA	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14 j	< .14 j	< .14 j
-----					
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .013	.00797 C	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.00656 C	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003
-----					
Dimethoate	< .033 rr	< .033 j	< .033 j	< .033 j	< .033 j
Endosulfan sulfate	< .003	< .3	< .003	< .003	< .003
Endrin	< .003	< .022	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< 10	< .003	< .003	< .003
-----					
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB010 2 02/09/94	SMBKGSB010 7.5 02/09/94	SMBKGSB011 11 02/08/94	SMBKGSB011 14 02/08/94	SMBKGSB011 19.5 02/08/94
Analytes					
Pesticides/PCBs					
Methoxychlor	< .003	< .013	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .2	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< 2	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB010 2 02/09/94	SMBKGSB010 7.5 02/09/94	SMBKGSB011 11 02/08/94	SMBKGSB011 14 02/08/94	SMBKGSB011 19.5 02/08/94
Analytes					
Herbicides					
245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Dalepon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01
Dinoseb	< .01	< .01	< .01	< .01	< .01
MCPA	< .2	< .2	< .2	< .2	< .2
MCP	< .2	< .2	< .2	< .2	< .2
Metals					
Aluminum	5100	2770	12900	6100	4470
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	15	6.7	8.91 j	8.92 j	4.47 j
Barium	< 39.8	< 39.8	84.4	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5
Boron	< 5	15.5	< 5	10.1	5.53
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	796	110000	1990	62200	110000
Chromium	6.09	9.32	14.1	9.74	8.94
Cobalt	4.1	2.44	8.32	4.69	3.62

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94

Analytes

Metals

Copper	6.09	6.66	22.3	17.6	13.8
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	7340	5880	21100	12900	8830
Lead	< 5	< 5	11.7	< 5	< 5
Magnesium	721	74400	2700	41100	42600
Manganese	162	155	528	481	298
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	4.35	8.88	22.3	15.3	12.8
Potassium	336	633	985	657	436
Selenium	.46 rr	< .25 rr	< .25 rr	< .25 rr	< .25 rr
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	199	488	363	481	500
Thallium	< 10	< 10	21.1	< 10	< 10
Vanadium	9.83	7.55	27	16.4	9.68
Zinc	17.4	26.6	63.3	50.5	34

Landfill Parameters

Ammonia	34.7 j	7.85 bj	24.3 b	15 b	< 6.25
Chloride	< 5	< 5	< 5 j	< 5 j	< 5 j
Fluoride	6.9 b	< 2.5	4.72 bj	< 2.5 j	< 2.5 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB010	SMBKGSB010	SMBKGSB011	SMBKGSB011	SMBKGSB011
Depth (feet):	2	7.5	11	14	19.5
Sample Date:	02/09/94	02/09/94	02/08/94	02/08/94	02/08/94
Analytes					
-----					
Landfill Parameters					
Nitrite, Nitrate -- Non-Specific	2.35 j	.465 j	1.43 j	1.01 j	< .2 j
Sulfate	< 25	< 25	< 25 j	< 25 j	< 25 j
Total Organic Carbon	2800 j	47000 j	2700 j	40000 j	48000 j
Total recoverable phenolics	< 1	< 1	< 1 j	< 1 j	< 1 j
pH	7.6 j	8.2 j	7.8 j	8.2 j	9.4 j

Note: Results are reported in micrograms per gram (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94
<hr/>					
Analytes					
<hr/>					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	.0091 S	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
<hr/>					
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
<hr/>					
Acetic acid, vinyl ester	< .01 j	< .01	< .01	< .01 j	< .01 j
Acetone	.039 Bb	.015 Bb	.018 Bb	< .01	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
<hr/>					
Bromomethane	< .01	< .01 j	< .01 j	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5	
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes						
-----						
Volatile Organic Compounds						
Chlorobenzene	< .01	< .01	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01	< .01 j	< .01 j	< .01	< .01	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .01	< .01
Methylene chloride	.013 b	< .01	< .01	< .01	< .01	.017 b
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01	< .01
Trichlorofluoromethane	NA	NA	NA	NA	NA	NA
Vinyl chloride	< .01	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB011 8.5 02/08/94	SMBKGSB08A 1.5 02/06/94	SMBKGSB08A 11 02/06/94	SMBKGSB08A 12.5 02/06/94	SMBKGSB08A 15.5 02/06/94
Analytes					
-----					
Volatiles Organic Compounds					
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
Semivolatiles Organic Compounds					
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 j	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14	< .14	< .14	< .14	< .14
2-Methylphenol	< .14	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5	
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94	
Analytes						
-----						
Semivolatile Organic Compounds						
3,3'-Dichlorobenzidine	< .67 j	< .67	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3 j	< .3	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67 j	< .67	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14	< .14	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14 j	< .14	< .14	< .14	< .14	< .14
Benzo[a]pyrene	< .14	< .14	< .14	< .14	< .14	< .14

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94

Analytes

Semivolatile Organic Compounds

Benzoic acid	< .14	< 1.4	< 1.4	< 1.4	< 1.4
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.53 Bb	7.2 Bb	.75 Bb	.67 Bb	1.5 Bb
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14

Chrysene	< .14	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	< .14	< .14	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14	< .14
Dibenzo[a,h]anthracene	< .16	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14

Diethylphthalate	< .14	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Docosane	NA	NA	NA	NA	NA
Dodecane	NA	NA	NA	NA	NA
Eicosane	NA	NA	NA	.33 Sj	NA

Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Heneicosane	NA	NA	NA	.33 S	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5	
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94	
Analytes						
-----						
Semivolatile Organic Compounds						
Heptadecane	NA	NA	NA	.55	NA	NA
Hexachlorobenzene	< .14	< .14	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14	< .14	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1	< 1	< 1
Hexachloroethane	< .14	< .14	< .14	< .14	< .14	< .14
Hexadecane	NA	NA	NA	.44	NA	NA
Indeno[1,2,3-c,D]pyrene	< .16	< .16	< .16	< .16	< .16	< .16
Isophorone	< .14	< .14	< .14	< .14	< .14	< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14	< .14	< .14
Naphthalene	< .14	< .14	< .14	< .14	< .14	< .14
Nitrobenzene	< .14	< .14	< .14	< .14	< .14	< .14
Nonadecane	NA	NA	NA	.33	NA	NA
Octadecane	NA	NA	NA	.44	NA	NA
Pentachlorophenol	< .67	< .67	< .67	< .67	< .67	< .67
Phenanthrene	< .14	< .14	< .14	< .14	< .14	< .14
Phenol	< .14	< .14	< .14	< .14	< .14	< .14
Pyrene	< .14	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes					
-----					
Semivolatile Organic Compounds					
Tetradecane	NA	NA	NA	.67 Sj	NA
Tridecane	NA	NA	NA	.44 Sj	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 j	< .14	< .14	< .14	< .14
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003 j	< .003 j	< .003 j	< .003 j
Dieldrin	< .003	< .003	< .003	< .003	< .003
Dimethoate					
Endosulfan sulfate	< .033 j	< .033 j	< .033 j	< .033 j	< .033 j
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor					
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB011 8.5 02/08/94	SMBKGSB08A 1.5 02/06/94	SMBKGSB08A 11 02/06/94	SMBKGSB08A 12.5 02/06/94	SMBKGSB08A 15.5 02/06/94
Analytes					
Pesticides/PCBs					
Methoxychlor	< .003	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013 / 1	< .013 / 1	< .013 / 1	< .013 / 1
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5	
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
<hr/>						
Analytes						
<hr/>						
Herbicides						
245T	< .01	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01	< .01
<hr/>						
Dinoseb	< .01	< .01	< .01	< .01	< .01	< .01
MCPA	.87 C	< .2	< .2	< .2	< .2	< .2
MCPP	< .2	< .2	< .2	< .2	< .2	< .2
<hr/>						
Metals						
Aluminum	7370	22600	4190	7330	7900	
Antimony	< 5 J	< 5 J	< 5 J	< 5 J	< 5 J	
Arsenic	7.73 J	5 J	6.8	4.4	6.8	
Barium	48.3	151	< 39.8	< 39.8	135	
Beryllium	< .5	1.38	< .5	< .5	< .5	
<hr/>						
Boron	< 5	10.6	10.1	17.8	23.7	
Cadmium	< .5	< .5	< .5	< .5	< .5	
Calcium	1200	3890	82700	89900	86900	
Chromium	10.3	25.1	19.3	11.1	11.3	
Cobalt	5.43	17.6	4.3	5.33	5.53	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5	19.8
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
<hr/>						
Analytes						
<hr/>						
Metals						
Copper	13.3	21.4	12.5	16.6	14.7	
Cyanide	< .25	< .25	< .25	< .25	< .25	
Iron	13300	26400	9850	12200	13500	
Lead	6.76	16.3	< 5	< 5	7.56	
Magnesium	1810	4770	27200	30000	26000	
Manganese	459	741	260	300	293	
Mercury	< .1	< .1	< .1	< .1	< .1	
Nickel	13.3	25.1	15.9	17.8	16.9	
Potassium	737	1510	702	1890	2030	
Selenium	< .25 rr	< .25 rr/J	< .25 rr	< .25 rr	< .25 rr	
Silver	< .5	< .5	< .5	< .5	< .5	
Sodium	386	389	442	577	553	
Thallium	< 10	12.6 JP	< 10	< 10	11.3 JP	
Vanadium	16.9	46.5	11.3	18.9	16.9	
Zinc	41.1	77.9	34	41.1	38.4	
<hr/>						
Landfill Parameters						
Ammonia	25.6 J	25 J	11 J	18.4 J	19.8 J	
Chloride	< 5 J	< 5	< 5	< 5	< 5	
Fluoride	3.2 bj	10.1 b	< 2.5	< 2.5	3.17 b	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB011	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A	SMBKGSB08A
Depth (feet):	8.5	1.5	11	12.5	15.5
Sample Date:	02/08/94	02/06/94	02/06/94	02/06/94	02/06/94

Analytes

Landfill Parameters

Nitrite, Nitrate -- Non-Specific  
Sulfate  
Total Organic Carbon  
Total recoverable phenolics  
pH

.453	J	.361	b	.274	b	.343	b	.336	b
< 25	J	54.5		< 25		147		< 25	
2000	J	4300	J	16000	J	37000	J	23000	J
< 1		< 1		< 1		< 1		< 1	
7.7	rr	8.1	rr	8.2	rr	8.1	rr	8	rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB08A 6 02/06/94	SMBKGSB08A 7.5 02/06/94	SMBKGSB09A 11 02/06/94	SMBKGSB09A 12.5 02/06/94	SMBKGSB09A 17.5 02/06/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01	< .01	< .01	< .01	< .01
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	.039 Bb	.02 Bb	< .01	< .01	.037 Bb
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01	< .01	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5	17.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes					
-----					
Volatile Organic Compounds					
Chlorobenzene	< .01	< .01	< .01	< .01	< .01
Chloroethane	< .01	< .01	< .01	< .01	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01 j	< .01 j	< .01	< .01	< .01 j
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01	< .01	< .01	< .01	< .01
Methylene chloride	< .01	< .01	.016 b	< .01	< .01
Methylethyl ketone/2-Butanone	< .01	< .01	< .01	< .01	< .01
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Trichlorofluoromethane	NA	NA	NA	NA	NA
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01

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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94

Analytes

Volatiles Organic Compounds  
trans-1,3-Dichloropropene

	< .01	< .01	< .01	< .01
--	-------	-------	-------	-------

Semivolatiles Organic Compounds

- 1,2,4-Trichlorobenzene
- 1,2-Dichlorobenzene
- 1,3-Dichlorobenzene
- 1,4-Dichlorobenzene
- 2,4,5-Trichlorophenol

- 2,4,6-Trichlorophenol
- 2,4-Dichlorophenol
- 2,4-Dimethylphenol
- 2,4-Dinitrophenol
- 2,4-Dinitrotoluene

- 2,6-Dinitrotoluene
- 2-Chloronaphthalene
- 2-Chlorophenol
- 2-Methylnaphthalene
- 2-Methylphenol

- 2-Nitroaniline
- 2-Nitrophenol

	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .3	< .3	< .3	< .3
	< .3	< .3	< .3	< .3
	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .14	< .14	< .14	< .14
	< .67	< .67	< .67	< .67
	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB08A 6 02/06/94	SMBKGSB08A 7.5 02/06/94	SMBKGSB09A 11 02/06/94	SMBKGSB09A 12.5 02/06/94	SMBKGSB09A 17.5 02/06/94
Analytes					
Semivolatiles Organic Compounds					
3,3'-Dichlorobenzidine	< .67	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14	< .14
4-Methylphenol	< .14	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14	< .14	< .14	< .14	< .14
Acenaphthylene	< .14	< .14	< .14	< .14	< .14
Anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[Al]anthracene	< .14	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14	< .14
Benzo[a]pyrene	< .14	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB08A 6 02/06/94	SMBKGSB08A 7.5 02/06/94	SMBKGSB09A 11 02/06/94	SMBKGSB09A 12.5 02/06/94	SMBKGSB09A 17.5 02/06/94
Analytes					
Semivolatile Organic Compounds					
Benzoic acid	< .14	< .14	< .14	< .14	< .14
Benzyl alcohol	< .14	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.22 Bb	3.9 Bb	1.8 Bb	1.3 Bb	5 Bb
Butylbenzylphthalate	< .14	< .14	< .14	< .14	< .14
Carbazole	< .14	< .14	< .14	< .14	< .14
Chrysene	< .14	< .14	< .14	< .14	< .14
Di-N-butyl phthalate	< .14	< .14	.23 Bb	.24 Bb	< .14
Di-N-octyl phthalate	< .14	< .14	< .14	< .14	< .14
Dibenzof[A,h]anthracene	< .16	< .16	< .16	< .16	< .16
Dibenzofuran	< .14	< .14	< .14	< .14	< .14
Diethylphthalate	< .14	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14	< .14	< .14	< .14	< .14
Docosane	NA	NA	NA	.34 Sj	NA
Dodecane	NA	NA	.35 Sj	NA	NA
Eicosane	NA	NA	NA	.34 Sj	NA
Fluoranthene	< .14	< .14	< .14	< .14	< .14
Fluorene	< .14	< .14	< .14	< .14	< .14
Heneicosane	NA	NA	NA	.34 S	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5	17.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94

Analytes

Semivolatile Organic Compounds

Heptadecane	NA	NA	.46	SJ	.57	SJ	NA
Hexachlorobenzene	< .14	< .14	< .14		< .14		< .14
Hexachlorobutadiene	< .14	< .14	< .14		< .14		< .14
Hexachlorocyclopentadiene	< 1	< 1	< 1		< 1		< 1
Hexachloroethane	< .14	< .14	< .14		< .14		< .14

Hexadecane	NA	NA	.46	SJ	.57	SJ	NA
Indeno[1,2,3-C,D]pyrene	< .16	< .16	< .16		< .16		< .16
Isophorone	< .14	< .14	< .14		< .14		< .14
N-Nitrosodi-N-propylamine	< .14	< .14	< .14		< .14		< .14
N-Nitrosodiphenylamine	< .14	< .14	< .14		< .14		< .14

Naphthalene	< .14	< .14	< .14		< .14		< .14
Nitrobenzene	< .14	< .14	< .14		< .14		< .14
Nonadecane	NA	NA	.35	SJ	.34	SJ	NA
Octadecane	NA	NA	NA		NA		NA
Pentachlorophenol	< .67	< .67	< .67		< .67		< .67

Phenanthrene	< .14	< .14	< .14		< .14		< .14
Phenol	< .14	< .14	< .14		< .14		< .14
Pyrene	< .14	< .14	< .14		< .14		< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5	17.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes	NA	NA	.35	.68	NA
Semivolatile Organic Compounds	NA	NA	NA	.46	NA
Tetradecane	NA	NA	NA	.46	NA
Tridecane	NA	NA	NA	.46	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14	< .14	< .14	< .14	< .14
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003
Dimethoate	< .033	< .033	< .033	< .033	< .033
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: Depth (feet): Sample Date:	SMBKGSB08A 6 02/06/94	SMBKGSB08A 7.5 02/06/94	SMBKGSB09A 11 02/06/94	SMBKGSB09A 12.5 02/06/94	SMBKGSB09A 17.5 02/06/94
Analytes					
Pesticides/PCBs					
Methoxychlor	< .003	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	.0888 C/I	< .013 /I	< .013 /I	< .013 /I	< .013 /I
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5	17.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94

Analytes

Herbicides

245T	< .01	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01	< .01
Datapon	< .01	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01	< .01
Dichloroprop	< .01	< .01	< .01	< .01	< .01

Dinoseb

MCPA	< .01	< .01	< .01	< .01	< .01
MCPB	< .2	< .2	< .2	< .2	< .2
MCPD	< .2	< .2	< .2	< .2	< .2

Metals

Aluminum	4940	7200	8290	8330	2450
Antimony	< 5 j	< 5 j	< 5 j	< 5 j	< 5 j
Arsenic	4.5	5.57 j	4.6	2.3	3.12
Barium	< 39.8	46.5	< 39.8	63.9	< 39.8
Beryllium	< .5	< .5	< .5	.674	< .5
Boron	14.6	15.1	19.6	18.3	8.25
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	83100	87100	91000	95900	87000
Chromium	8.65	11.1	12.7	13.7	5.24
Cobalt	3.48	5.11	3.92	5.94	< 2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5	17.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94

-----  
Analytes

Metals

Copper	13.5	16.3	15	14.8	6.91
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	11000	13900	12700	12600	6350
Lead	< 5	< 5	< 5	6.39	< 5
Magnesium	30300	30200	25300	29700	23400
Manganese	180	256	288	331	234
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	12.4	17.4	16.1	17.1	6.24
Potassium	1070	1510	2190	2050	602
Selenium	< .25 rr	< .25 rr/J	< .25 rr	< .25 rr	< .25 rr
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	449	511	495	582	424
Thallium	< 10	12.8	17.3	14.8	< 10
Vanadium	18	17.4	17.3	18.3	7.58
Zinc	38.2	45.3	41.5	36.5	17.8

Landfill Parameters

Ammonia	14.7 j	10.6 bj	15.9 j	19.3 j	11.9 j
Chloride	< 5	< 5	< 5	< 5	< 5
Fluoride	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name:	SMBKGSB08A	SMBKGSB08A	SMBKGSB09A	SMBKGSB09A	SMBKGSB09A
Depth (feet):	6	7.5	11	12.5	17.5
Sample Date:	02/06/94	02/06/94	02/06/94	02/06/94	02/06/94
Analytes					
-----					
Landfill Parameters					
Nitrite, Nitrate -- Non-Specific	< .2	.268 b	.537 b	.455 b	.407 b
Sulfate	< 25	< 25	40.7	195	39.4
Total Organic Carbon	24000 j	27000 j	35000 j	20000 j	13000 j
Total recoverable phenolics	4.19	< 1	< 1	< 1	< 1
pH	8.1 rr	8 rr	8.2 rr	8.2 rr	8.3 rr

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes	
-----	
Volatile Organic Compounds	
1,1,1-Trichloroethane	< .01
1,1,2,2-Tetrachloroethane	< .01
1,1,2-Trichloro-1,2,2-trifluoroethane	NA
1,1,2-Trichloroethane	< .01
1,1-Dichloroethane	< .01
1,1-Dichloroethene	< .01
1,2-Dichloroethane	< .01
1,2-Dichloroethenes (cis & trans)	< .01
1,2-Dichloropropane	< .01
2-Chloroethylvinyl ether	< .01
Acetic acid, vinyl ester	< .01 J
Acetone	< .01
Benzene	< .01
Bromodichloromethane	< .01
Bromoform	< .01
Bromomethane	< .01
Carbon disulfide	< .01
Carbon tetrachloride	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes	
-----	
Volatile Organic Compounds	
Chlorobenzene	< .01
Chloroethane	< .01
Chloroform	< .01
Chloromethane	< .01
Dibromochloromethane	< .01
Ethylbenzene	< .01
Methyl-N-butyl ketone	< .01
Methylene chloride	.018 b
Methylethyl ketone/2-Butanone	< .01
Methylisobutyl ketone	< .01
Styrene	< .01
Tetrachloroethene	< .01
Toluene	< .01
Trichloroethene	< .01
Trichlorofluoromethane	NA
Vinyl chloride	< .01
Xylenes, total combined	< .01
cis-1,3-Dichloropropene	< .01

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes

-----  
Volatile Organic Compounds  
trans-1,3-Dichloropropene

< .01

Semivolatle Organic Compounds

1,2,4-Trichlorobenzene  
1,2-Dichlorobenzene  
1,3-Dichlorobenzene  
1,4-Dichlorobenzene  
2,4,5-Trichlorophenol

< .14  
< .14  
< .14  
< .14  
< .3

2,4,6-Trichlorophenol  
2,4-Dichlorophenol  
2,4-Dimethylphenol  
2,4-Dinitrophenol  
2,4-Dinitrotoluene

< .3  
< .14  
< .14  
< 1.4  
< .14

2,6-Dinitrotoluene  
2-Chloronaphthalene  
2-Chlorophenol  
2-Methylnaphthalene  
2-Methylphenol

< .14  
< .14  
< .14  
< .14  
< .14

2-Nitroaniline  
2-Nitrophenol

< .67  
< .14

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes

Semivolatle Organic Compounds

3,3'-Dichlorobenzidine < .67  
3-Methyl-4-chlorophenol < .14  
3-Nitroaniline < .67 j  
4,6-Dinitro-2-cresol < 1.4  
4-Bromophenylphenyl ether < .14

4-Chloroaniline < .3  
4-Chlorophenylphenyl ether < .14  
4-Methylphenol < .14  
4-Nitroaniline < .67  
4-Nitrophenol < 1.4

Acenaphthene < .14  
Acenaphthylene < .14  
Anthracene < .14  
Benzo[A]anthracene < .14  
Benzo[B]fluoranthene < .14

Benzo[G,H,I]perylene < .16  
Benzo[K]fluoranthene < .14  
Benzo[a]pyrene < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes

Semivolatile Organic Compounds

Benzoic acid < .14  
Benzyl alcohol < .14  
Bis (2-Ethylhexyl) phthalate .5 Bb  
Butylbenzylphthalate < .14  
Carbazole < .14

Chrysene < .14  
Di-N-butyl phthalate < .14  
Di-N-octyl phthalate < .14  
Dibenzo[A,H]anthracene < .16  
Dibenzofuran < .14

Diethylphthalate < .14  
Dimethylphthalate < .14  
Docosane NA  
Dodecane NA  
Eicosane NA

Fluoranthene < .14  
Fluorene < .14  
Heneicosane NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes

Semivolatiles Organic Compounds

Heptadecane	NA
Hexachlorobenzene	< .14
Hexachlorobutadiene	< .14
Hexachlorocyclopentadiene	< 1
Hexachloroethane	< .14

Hexadecane	NA
Indeno[1,2,3-C,D]pyrene	< .16
Isophorone	< .14
N-Nitrosodi-N-propylamine	< .14
N-Nitrosodiphenylamine	< .14

Naphthalene	< .14
Nitrobenzene	< .14
Nonadecane	NA
Octadecane	NA
Pentachlorophenol	< .67

Phenanthrene	< .14
Phenol	< .14
Pyrene	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes

Semivolatile Organic Compounds

Tetradecane	NA
Tridecane	NA
bis (2-Chloroethoxy) methane	< .14
bis (2-Chloroethyl) ether	< .14
bis (2-Chloroisopropyl) ether	< .14

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003
Aldrin	< .003 j
Dieldrin	< .003

Dimethoate	< .033 j
Endosulfan sulfate	< .003
Endrin	< .003
Endrin aldehyde	< .022
Endrin ketone	< .003

Heptachlor	< .003
Heptachlor epoxide	< .003
Lindane	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes	
-----	
Pesticides/PCBs	
Methoxychlor	< .003
PCB 1016	< .013
PCB 1221	< .013
PCB 1232	< .013
PCB 1242	< .013
PCB 1248	< .013
PCB 1254	< .013
PCB 1260	< .013 /1
Toxaphene	< .3
alpha-Benzenhexachloride	< .003
alpha-Chlordane	< .003
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenhexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenhexachloride	< .003
gamma-Chlordane	< .003
Herbicides	
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes	
-----	
Herbicides	
245T	< .01
245TP	< .01
Dalepon	< .01
Dicamba	< .01
Dichloroprop	< .01
Dinoseb	< .01
MCPA	< .2
MCPP	< .2
Metals	
Aluminum	7250
Antimony	< 5 j
Arsenic	6.8
Barium	< 39.8
Beryllium	< .5
Boron	19.3
Cadmium	< .5
Calcium	81500
Chromium	10.8
Cobalt	5.21

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes

Metals

Copper	14.7
Cyanide	< .25
Iron	12500
Lead	6.12
Magnesium	28300
Manganese	294
Mercury	< .1
Nickel	17
Potassium	1810
Selenium	< .25 pp
Silver	< .5
Sodium	521
Thallium	15.9
Vanadium	19.3
Zinc	38.5

Landfill Parameters

Ammonia	18.2 J
Chloride	< 5
Fluoride	< 2.5

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D2E:  
Background Subsurface Soil Samples Analytical Results  
Sites SMBKGSB08A, SMBKGSB09A, SMBKGSB010, and SMBKGSB011

Sample Name: SMBKGSB09A  
Depth (feet): 8  
Sample Date: 02/06/94

Analytes	
-----	
Landfill Parameters	
Nitrite, Nitrate -- Non-Specific	.794
Sulfate	40.7
Total Organic Carbon	23000 J
Total recoverable phenolics	< 1
pH	8.2 rr

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94
Analytes			
-----			
Volatile Organic Compounds			
1,1,1-Trichloroethane	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2 j	< 2	< 2 j
1,1,2-Trichloroethane	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2
2-Chloroethylvinyl ether	< 10 rr	< 10	< 10 rr
Acetic acid, vinyl ester	< 10	< 10	< 10
Acetone	< 10 j	< 10	< 10 j
Benzene	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2
Carbon disulfide	< 10 j	< 10	< 10 j
Carbon tetrachloride	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94
-----			
Analytes			
-----			
Volatile Organic Compounds			
Chloroethane	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2
Chloromethane	< 2 j	< 2	< 2 j
Dibromochloromethane	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2
Methyl-N-butyl ketone	< 10 j	< 10	< 10 j
Methylene chloride	< 10	< 10	< 10
Methylethyl ketone/2-Butanone	< 10 rr	< 10	< 10 rr
Methylisobutyl ketone	< 10 j	< 10	< 10 j
Styrene	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2
Toluene	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2 j	< 2	< 2 j
Semivolatiles Organic Compounds			
1,2,4-Trichlorobenzene	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94

Analytes

Semivolatiles Organic Compounds

1,2-Dichlorobenzene	< 2	< 2	< 2
1,2-Epoxydichlorobenzene	9 S	NA	NA
1,3-Dichlorobenzene	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 10	< 10

2,4,6-Trichlorophenol	< 2	< 10	< 10
2,4-Dichlorophenol	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	< 2
2,4-Dinitrophenol	< 30 j	< 30	< 30
2,4-Dinitrotoluene	< 2 j	< 2	< 2

2,6-Dinitrotoluene	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2
2-Cyclohexen-1-one	4 S	NA	NA
2-Methylnaphthalene	< 2	< 2	< 2

2-Methylphenol	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name: Depth (feet): Sample Date:	SMBKGMW001 10 02/02/94	SMBKGMW005 15 02/05/94	SMBKGMW007 8 02/05/94
Analytes			
Semivolatile Organic Compounds			
3,3'-Dichlorobenzidine	< 10	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2	< 2
3-Nitroaniline	< 10 j	< 10	< 10
4,6-Dinitro-2-cresol	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2
4-Methylphenol	< 2	< 2	< 2
4-Nitroaniline	< 10 j	< 10	< 10
4-Nitrophenol	< 20 j	< 20	< 20
Acenaphthene	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2
Benzo[A]anthracene	< 2	< 2	< 2
Benzo[B]fluoranthene	< 2	< 2	< 2
Benzo[G,H,I]perylene	< 2	< 2	< 2
Benzo[K]fluoranthene	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94
<hr/>			
Analytes			
<hr/>			
Semivolatile Organic Compounds			
Benzoic acid	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	< 2	< 2	3.6 Bb
Butylbenzylphthalate	< 2	< 2	< 2
Carbazole	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2
Di-N-butyl phthalate	< 2	< 2	< 2
Di-N-octyl phthalate	< 2	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2
Diethylphthalate	< 2 j	< 2	< 2
Dimethylphthalate	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10 j	< 10	< 10
Hexachloroethane	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name: Depth (feet): Sample Date:	SMBKGMW001 10 02/02/94	SMBKGMW005 15 02/05/94	SMBKGMW007 8 02/05/94
Analytes			
Semivolatile Organic Compounds			
Indeno[1,2,3-C,D]pyrene	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2 j	< 2	< 2
Naphthalene	< 2	< 2	< 2
Nitrobenzene	< 2	< 2	< 2
Pentachlorophenol	< 10	< 10	< 10
Phenanthrene	< 2	< 2	< 2
Phenol	< 2	< 2	< 2
Pyrene	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	< 2	< 2
bis (2-Chloroethyl) ether	< 2	< 2	< 2
bis (2-Chloroisopropyl) ether	< 2	< 2	< 2
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007 j	< .007 j	< .007
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005 j	< .005 j	< .005
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007 j	< .007 j	< .007
Aldrin	< .005 j	< .005 j	< .005
Dieldrin	< .005 j	< .005 j	< .005

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name: Depth (feet): Sample Date:	SMBKGMW001 10 02/02/94	SMBKGMW005 15 02/05/94	SMBKGMW007 8 02/05/94
Analytes			
Pesticides/PCBs			
Dimethoate	< .25 j	< .25 j	< .25 j
Endosulfan sulfate	< .005 j	< .005 j	< .005 j
Endrin	< .005 j	< .005 j	< .005 j
Endrin aldehyde	< .022 j	< .022 j	< .022 j
Endrin ketone	< .006 j	< .006 j	< .006 j
Heptachlor	< .005 j	< .005 j	< .005 j
Heptachlor epoxide	< .005 j	< .005 j	< .005 j
Lindane	< .005 j	< .005 j	< .005 j
Methoxychlor	< .009 j	< .009 j	< .009 j
PCB 1016	< .13 j	< .13 j	< .13 j
PCB 1221	< .13 j	< .13 j	< .13 j
PCB 1232	< .13 j	< .13 j	< .13 j
PCB 1242	< .13 j	< .13 j	< .13 j
PCB 1248	< .13 j	< .13 j	< .13 j
PCB 1254	< .13 j	< .13 j	< .13 j
PCB 1260	< .13 j	< .13 j	< .13 j
Toxaphene	< .6 j	< .6 j	< .6 j
alpha-Benzenhexachloride	< .005 j	< .005 j	< .005 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name: Depth (feet): Sample Date:	SMBKGMW001 10 02/02/94	SMBKGMW005 15 02/05/94	SMBKGMW007 8 02/05/94
Analytes			
Pesticides/PCBs			
alpha-Chlordane	< .005 J	< .005 J	< .005
alpha-Endosulfan/Endosulfan I	< .005 J	< .005 J	< .005
beta-Benzenhexachloride	< .005 J	< .005 J	< .005
beta-Endosulfan/Endosulfan II	< .005 J	< .005 J	< .005
delta-Benzenhexachloride	< .005 J	< .005 J	< .005
gamma-Chlordane	< .005 J	< .005 J	< .005
Herbicides			
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1	< .1	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1
245T	< .1	< .1	< .1
245TP	< .1	< .1	< .1
Dalepon	< .1	< .1	< .1
Dicamba	< .1	< .1	< .1
Dichloroprop	< .1	< .1	< .1
Dinoseb	< .1	< .1	< .1
MCPA	< 3	< 3	< 3
MCPP	< 3	< 3	< 3
Metals			
Aluminum	4290	2290	927
Aluminum (Filtered)	< 40 F	< 40 F	< 40 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94
<hr/>			
Analytes			
<hr/>			
Metals			
Antimony	< 3	< 3	< 3
Antimony (Filtered)	< 3 F	< 3 F	< 3 F
Arsenic	2.5 JP	4.4 b	< 2.5
Arsenic (Filtered)	< 2.5 F	3 Fb	< 2.5 F
Barium	96.1	150	42.8
Barium (Filtered)	66.8 F	124 F	36.4 F
Beryllium	< 5	< 5	< 5
Beryllium (Filtered)	< 5 F	< 5 F	< 5 F
Boron	68.9	< 50	< 50
Cadmium	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 F
Calcium	127000	97700	59300
Calcium (Filtered)	102000 F	82400 F	57600 F
Chromium	< 10	< 10	< 10
Chromium (Filtered)	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F	< 20 F
Copper	7.22	< 5	< 5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A-  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94
Analytes			
-----			
Metals			
Copper (Filtered)	< 5 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5 J	< 2.5 J
Iron	6000	3260	1080
Iron (Filtered)	< 45 F	< 45 F	67.7 F
Lead	2.8 bj	< 2 J	< 2 J
Lead (Filtered)	< 2 Fj	< 2 Fj	< 2 Fj
Magnesium	45800	38200	17600
Magnesium (Filtered)	38300 F	33300 F	17200 F
Manganese	140 B	165 B	106 B
Manganese (Filtered)	45.6 FB	111 FB	92 FB
Mercury	< .2	< .2	< .2
Mercury (Filtered)	< .2 F	< .2 F	< .2 F
Nickel	< 15	< 15	< 15
Nickel (Filtered)	< 15 F	< 15 F	< 15 F
Potassium	3410	4400	1790
Potassium (Filtered)	1720 F	3140 F	1420 F
Selenium	< 2.5 J	< 2.5 J	< 2.5 J
Selenium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name: SMBKGMW001 SMBKGMW005 SMBKGMW007  
Depth (feet): 10 15 8  
Sample Date: 02/02/94 02/05/94 02/05/94

Analytes

Metals

Silver	< 5	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F	< 5 F
Sodium	11800	17300	5090
Sodium (Filtered)	12000 F	16100 F	5140 F
Thallium	< 2.5 j	< 2.5 j	< 2.5 j
Thallium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj
Vanadium	< 10	< 10	< 10
Vanadium (Filtered)	< 10 F	< 10 F	< 10 F
Zinc	30.2	< 20	< 20
Zinc (Filtered)	< 20 F	< 20 F	< 20 F

Landfill Parameters

Alkalinity	330000 j	320000 j	200000 j
Ammonia	< 50	< 50	< 50 j
Biological oxygen demand	1200 j	1000 j	2000 j
Chemical oxygen demand	< 5000 j	< 5000 j	< 5000 j
Chloride	29000	1100	17000
Fluoride	< 500	< 500	< 500
Nitrite, Nitrate -- Non-Specific	< 20	23.3 b	35.4 b
Sulfate	44000	87000	17000

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D3A.  
Background Groundwater Samples Analytical Results  
Sites SMBKGMW001, SMBKGMW005 and SMBKGMW007

Sample Name:	SMBKGMW001	SMBKGMW005	SMBKGMW007
Depth (feet):	10	15	8
Sample Date:	02/02/94	02/05/94	02/05/94
-----			
Analytes			
-----			
Landfill Parameters			
Total Organic Carbon	1500 bj	2600 j	5400 j
Total dissolved solids	510000 j	430000	250000 j
Total recoverable phenolics	< 2	3.5 b	4.41 b

-----  
Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name:	MW18	MW19	MW20	MW21	MW22
Depth (feet):	34	33	8	19	14
Sample Date:	01/28/94	01/27/94	01/31/94	01/31/94	01/27/94

Analytes

-----  
Volatile Organic Compounds

1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2

1,2,4-Trimethylbenzene

1,2-Dichloroethane	NA	NA	50	NA	NA
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	NA	NA	20	NA	NA

1-Ethyl-2-methylbenzene

1-Ethyl-3-methylbenzene	NA	NA	40	NA	NA
1-Ethyl-4-methylbenzene / 4-Ethyltoluene	NA	NA	10	NA	NA
2-Chloroethylvinyl ether	NA	NA	20	NA	NA
Acetic acid, vinyl ester	< 10	< 10	< 10	< 10	< 10
	< 10	< 10	< 10	< 10	< 10

Acetone

Benzene	< 10	< 10	< 10	< 10	< 10
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
	< 2	< 2	< 2	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
-----					
Volatile Organic Compounds					
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10 j	< 10 j	< 10	< 10	< 10 j
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2 j	< 2 j	< 2	< 2	< 2 j
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	4.1	< 2	< 2
Methyl-N-butyl ketone	< 10 j	< 10 j	< 10 j	< 10 j	< 10 j
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Methylethyl ketone/2-Butanone	< 10 rr	< 10 rr	< 10 rr	< 10 rr	< 10 rr
Methylisobutyl ketone	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
Volatile Organic Compounds					
Vinyl chloride	< 2	< 2	4.6	< 2	< 2
Xylenes, total combined	< 10	< 10	16	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene / Propylbenzene / 1-Phenylpropane	NA	NA	20 S	NA	NA
p-Cymene / 4-(1-Methylethyl)toluene / 1-Methy	NA	NA	6 S	NA	NA
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,2-Epoxydicyclohexene	NA	NA	6 S	8 S	NA
1,3-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4,6-Trichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4-Dichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	6.7	< 2	< 2
2,4-Dinitrophenol	< 30 J	< 30 J	< 30 J	< 30 J	< 30 J
2,4-Dinitrotoluene	< 2	< 2	< 2 J	< 2 J	< 2 J
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
-----					
Analytes					
-----					
Semivolatile Organic Compounds					
2-Chloronaphthalene	< 2	< 2	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2	< 2	< 2
2-Cyclohexen-1-ol	NA	NA	4 S	NA	NA
2-Cyclohexen-1-one	NA	NA	5 S	NA	NA
2-Methylnaphthalene	< 2	< 2	< 2	< 2	< 2
-----					
2-Methylphenol	< 2	< 2	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10 j	< 10 j	< 10 j	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2	4.5	< 2	< 2
-----					
3-Nitroaniline	< 10	< 10	< 10 j	< 10 j	< 10
4,6-Dinitro-2-cresol	< 20	< 20	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2	< 2	< 2
-----					
4-Methylphenol	< 2	< 2	< 2	< 2	< 2
4-Nitroaniline	< 10 j	< 10 j	< 10 j	< 10 j	< 10 j
4-Nitrophenol	< 20	< 20	< 20 j	< 20 j	< 20 j

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
Semivolatile Organic Compounds					
Acenaphthene	< 2	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2	< 2	< 2
Benzo[a]anthracene	< 2	< 2	< 2	< 2	< 2
Benzo[b]fluoranthene	< 2	< 2	< 2	< 2	< 2
Benzo[g,h,i]perylene	< 2	< 2	< 2	< 2	< 2
Benzo[k]fluoranthene	< 2	< 2	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2	< 2	< 2	< 2
Benzoic acid	< 20 j	< 20 j	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	< 2	2.3 b	4.6 b	3.4 b	< 2
Butylbenzylphthalate	< 2	< 2	< 2	< 2	< 2
Camphor	NA	NA	20 S	NA	NA
Caprolactam	7 S	20 S	NA	40 S	NA
Carbazole	< 2	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2	< 2
Cumene / Isopropylbenzene / (1-Methylethyl)benzene	NA	NA	8 S	NA	NA
Di-N-butyl phthalate	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
Semivolatiles Organic Compounds					
Di-N-octyl phthalate	< 2	< 2	< 2	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2	< 2
Diethylphthalate	< 2	< 2	< 2	< 2	< 2
Dimethylphthalate	< 2	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2	< 2	< 2
Heptacosane	NA	NA	NA	NA	NA
Hexachlorobenzene	< 2	< 2	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	< 2	< 2	< 2	< 2	< 2
Indeno[1,2,3-C,D]pyrene	< 2	< 2	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2	< 2	< 2
N,N-Diethyl-3-methylbenzamide / N,N-Diethyl-m-toluamide	NA	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	< 2	< 2	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2	< 2	< 2	< 2
Naphthalene	< 2	< 2	2.7	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
Semivolatile Organic Compounds					
Nitrobenzene	< 2	< 2	< 2	< 2	< 2
Pentachlorophenol	< 10 j	< 10 j	< 10	< 10	< 10 j
Phenanthrene	< 2	< 2	< 2	< 2	< 2
Phenol	< 2	< 2	< 2	< 2	< 2
Pyrene	< 2	< 2	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	< 2	< 2	< 2	< 2
bis (2-Chloroethyl) ether	< 2	< 2	< 2	< 2	< 2
bis (2-Chloroisopropyl) ether	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene / Propylbenzene / 1-Phenylpropane	NA	NA	9 S	NA	NA
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	< .007 j	< .007	< .007 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005	< .005	.0064 CJ	< .005	< .005 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007	< .007	< .007 j	< .007	< .007 j
Aldrin	< .005	< .005	< .005 j	< .005	< .005 j
Dieldrin	< .005	< .005	< .005 j	< .005	< .005 j
Dimethoate	< .25 j	< .25 j	< .25 j	< .25 j	< .25 j
Endosulfan sulfate	< .005	< .005	< .005 j	< .005	< .005 j
Endrin	< .005	< .005	< .005 j	< .005	< .005 j
Endrin aldehyde	< .022	< .022	< .022 j	< .022	< .022 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name:		MW18	MW19	MW20	MW21	MW22
Depth (feet):		34	33	8	19	14
Sample Date:		01/28/94	01/27/94	01/31/94	01/31/94	01/27/94
Analytes						
Pesticides/PCBs						
Endrin ketone		< .006	< .006	< .006 j	< .006	< .006 j
Heptachlor		< .005	< .005	< .005 j	< .005	< .005 j
Heptachlor epoxide		< .005	< .005	< .005 j	< .005	< .005 j
Lindane		< .005	< .005	< .005 j	< .005	< .005 j
Methoxychlor		< .009	< .009	< .009 j	< .009	< .009 j
PCBs						
PCB 1016		< .13	< .13	< .13 j	< .13	< .13 j
PCB 1221		< .13	< .13	< .13 j	< .13	< .13 j
PCB 1232		< .13	< .13	< .13 j	< .13	< .13 j
PCB 1242		< .13	< .13	< .13 j	< .13	< .13 j
PCB 1248		< .13	< .13	< .13 j	< .13	< .13 j
PCBs						
PCB 1254		< .13	< .13	< .13 j	< .13	< .13 j
PCB 1260		< .13	< .13	< .13 j	< .13	< .13 j
Toxaphene		< .6	< .6	< .6 j	< .6	< .6 j
alpha-Benzenehexachloride		< .005	< .005	< .005 j	< .005	< .005 j
alpha-Chlordane		< .005	< .005	< .005 j	< .005	< .005 j
alpha-Endosulfan/Endosulfan I						
alpha-Endosulfan/Endosulfan I		< .005	< .005	< .005 j	< .005	< .005 j
beta-Benzenehexachloride		< .005	< .005	< .005 j	< .005	< .005 j
beta-Endosulfan/Endosulfan II		< .005	< .005	< .005 j	< .005	< .005 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1



Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name:	MW18	MW19	MW20	MW21	MW22
Depth (feet):	34	33	8	19	14
Sample Date:	01/28/94	01/27/94	01/31/94	01/31/94	01/27/94
Analytes					
-----					
Pesticides/PCBs					
delta-Benzenhexachloride	< .005	< .005	< .005 j	< .005	< .005 j
gamma-Chlordane	< .005	< .005	< .005 j	< .005	< .005 j
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1 j	< .1 j	< .1 j	< .1 rr	< .1 j
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	< .1	< .1
245T	< .1	< .1	< .1	< .1	< .1
245TP	< .1	< .1	< .1	< .1	< .1
Datapon	< .1	< .1	< .1	< .1	< .1
Dicamba	< .1	< .1	< .1	< .1	< .1
Dichloroprop	< .1	< .1	< .1	< .1	< .1
Dinoseb	< .1	< .1	< .1	< .1	< .1
MCPA	< 3	< 3	< 3	< 3	< 3
MCPP	< 3	< 3	< 3	< 3	< 3
Metals					
Aluminum	18600	5120	2690	5170	5970
Aluminum (Filtered)	< 40 F	< 40 F	< 40 F	< 40 F	< 40 F
Antimony	< 3	< 3 j	< 3	< 3	< 3 j
Antimony (Filtered)	5.2 F	< 3 Frr	< 3 F	< 3 F	< 3 Frr
Arsenic	14	7.7	8	7.3	< 2.5
Arsenic (Filtered)	< 2.5 F	3 F	4.1 F	< 2.5 F	< 2.5 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name:	MW18	MW19	MW20	MW21	MW22
Depth (feet):	34	33	8	19	14
Sample Date:	01/28/94	01/27/94	01/31/94	01/31/94	01/27/94
<b>Analytes</b>					
<b>Metals</b>					
Barium	504	208	510	210	116
Barium (Filtered)	361 F	149 F	463 F	117 F	77.6 F
Beryllium	< 5 /J	< 5 /J	< 5 /J	< 5 /J	< 5 /J
Beryllium (Filtered)	< 5 F/J	< 5 F/J	< 5 F/J	< 5 F/J	< 5 F/J
Boron	99	69.2	952	< 50	< 50
Cadmium	< 5	< 5	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F	< 5 F
Calcium	150000	106000	151000	161000	135000
Calcium (Filtered)	66900 F	80200 F	147000 F	112000 F	112000 F
Chromium	79.1	21.7	< 10	30	18.3
Chromium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F	< 20 F
Copper	30.8	7.45	< 5	15.9	9.37
Copper (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5	2.8	< 2.5	< 2.5
Iron	33900	9250	52400	13400	7890
Iron (Filtered)	< 45 F	69.3 F	46200 F	< 45 F	60.2 F

Note: Results are reported in micrograms per liter (ug/L).

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
Metals					
Lead	11.9 j	3.6 b	4.8 j	8.7 j	< 2
Lead (Filtered)	< 2 Fj	< 2 F	< 2 Fj	< 2 Fj	< 2 F
Magnesium	56500	47600	57900	58800	44500
Magnesium (Filtered)	34400 F	40500 F	56600 F	46200 F	38600 F
Manganese	733	202	339	536	238
Manganese (Filtered)	118 F	68.5 F	287 F	61 F	97.4 F
Mercury	< .2	< .2	< .2	< .2	< .2
Nickel	38.6	< 15	< 15	16.2	15.5
Nickel (Filtered)	< 15 F	< 15 F	< 15 F	< 15 F	< 15 F
Potassium	9870	4360	5420	4710	2590
Potassium (Filtered)	4890 F	3050 F	5320 F	4040 F	609 F
Selenium	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j
Selenium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj
Silver	< 5	< 5	< 5	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F	< 5 F
Sodium	23800	18400	39100	30800	11500
Sodium (Filtered)	26000 F	18200 F	40300 F	36800 F	11900 F
Thallium	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j	< 2.5 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: Depth (feet): Sample Date:	MW18 34 01/28/94	MW19 33 01/27/94	MW20 8 01/31/94	MW21 19 01/31/94	MW22 14 01/27/94
Analytes					
Metals					
Thallium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj
Vanadium	32.9 /J	< 10 /J	< 10 /J	< 10 /J	< 10 /J
Vanadium (Filtered)	< 10 F/J	< 10 F/J	< 10 F/J	< 10 F/J	< 10 F/J
Zinc	84.5	29.1	< 20	31.3	25
Zinc (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F	< 20 F
Landfill Parameters					
Alkalinity	410000 j	450000 j	430000 j	450000 j	410000 j
Ammonia	202 j	< 50 j	7600 j	< 50 j	< 50 j
Biological oxygen demand	5300 rr	1100 rr	8000 j	1000 j	< 1000 rr
Chemical oxygen demand	50000 j	< 5000 j	44000 j	< 5000 j	< 5000 j
Chloride	3900	1600 b	30000	4100	4700
Fluoride	590 rr	590 rr	710 rr	530 rr	< 500 rr
Nitrite, Nitrate -- Non-Specific	151	473	< 20	82.8	< 20
Sulfate	27000	20000	5700 b	140000	81000
Total Organic Carbon	1200 bj	2200 bj	14000 j	< 1000 j	2500 j
Total dissolved solids	400000 j	410000 j	740000 j	650000 j	550000 j
Total recoverable phenolics	14.3	< 2	8.78	5.7	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

-----  
Volatile Organic Compounds

1,1,1-Trichloroethane	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2
1,1-Dichloroethane	< 2	< 2
1,1-Dichloroethene	< 2	< 2

1,2,4-Trimethylbenzene	NA	NA
1,2-Dichloroethane	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2
1,2-Dichloropropane	< 2	< 2
1,3,5-Trimethylbenzene	NA	NA

1-Ethyl-2-methylbenzene	NA	NA
1-Ethyl-3-methylbenzene	NA	NA
1-Ethyl-4-methylbenzene / 4-Ethyltoluene	NA	NA
2-Chloroethylvinyl ether	< 10	rr < 10
Acetic acid, vinyl ester	< 10	< 10

Acetone	< 10	j < 10
Benzene	< 2	< 2
Bromodichloromethane	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Volatile Organic Compounds

Bromoform	< 2	< 2
Bromomethane	< 2	< 2
Carbon disulfide	< 10 j	< 10 j
Carbon tetrachloride	< 2	< 2
Chlorobenzene	< 2	< 2
Chloroethane	< 10	< 10
Chloroform	< 2	< 2
Chloromethane	< 2 j	< 2 j
Dibromochloromethane	< 2	< 2
Ethylbenzene	< 2	< 2
Methyl-N-butyl ketone	< 10 j	< 10 j
Methylene chloride	< 10	< 10
Methylethyl ketone/2-Butanone	< 10 rr	< 10 rr
Methylisobutyl ketone	< 10	< 10
Styrene	< 2	< 2
Tetrachloroethene	< 2	< 2
Toluene	< 2	< 2
Trichloroethene	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Volatile Organic Compounds

Vinyl chloride < 2 < 2  
Xylenes, total combined < 10 < 10  
cis-1,3-Dichloropropene < 2 < 2  
n-Propylbenzene / Propylbenzene / 1-Phenylpropane NA NA  
p-Cymene / 4-(1-Methylethyl)toluene / 1-Methy NA NA

trans-1,3-Dichloropropene

< 2 < 2

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene < 2 < 2  
1,2-Dichlorobenzene < 2 < 2  
1,2-Epoxyhexene NA NA  
1,3-Dichlorobenzene < 2 < 2  
1,4-Dichlorobenzene < 2 < 2

2,4,5-Trichlorophenol

< 2 < 2

2,4,6-Trichlorophenol

< 2 < 2

2,4-Dichlorophenol

< 2 < 2

2,4-Dimethylphenol

< 2 < 2

2,4-Dinitrophenol

< 30 j < 30 j

2,4-Dinitrotoluene

< 2 < 2 j

2,6-Dinitrotoluene

< 2 < 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name:	MW23	MW25
Depth (feet):	14	11
Sample Date:	01/28/94	01/30/94

Analytes

Semivolatile Organic Compounds

2-Chloronaphthalene	< 2	< 2
2-Chlorophenol	< 2	< 2
2-Cyclohexen-1-ol	NA	NA
2-Cyclohexen-1-one	NA	NA
2-Methylnaphthalene	< 2	< 2
2-Methylphenol	< 2	< 2
2-Nitroaniline	< 10	< 10
2-Nitrophenol	< 2	< 2
3,3'-Dichlorobenzidine	< 10 j	< 10
3-Methyl-4-chlorophenol	< 2	< 2
3-Nitroaniline	< 10	< 10 j
4,6-Dinitro-2-cresol	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2
4-Chloroaniline	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2
4-Methylphenol	< 2	< 2
4-Nitroaniline	< 10 j	< 10 j
4-Nitrophenol	< 20	< 20 j

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1



Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name:	MW23	MW25
Depth (feet):	14	11
Sample Date:	01/28/94	01/30/94

Analytes

Semivolatile Organic Compounds

Acenaphthene	< 2	< 2
Acenaphthylene	< 2	< 2
Anthracene	< 2	< 2
Benzo[a]anthracene	< 2	< 2
Benzo[b]fluoranthene	< 2	< 2

Benzo[G,H,I]perylene	< 2	< 2
Benzo[k]fluoranthene	< 2	< 2
Benzo[a]pyrene	< 2	< 2
Benzoic acid	< 20 j	< 20
Benzyl alcohol	< 2	< 2

Bis (2-Ethylhexyl) phthalate

Butylbenzylphthalate	< 2	< 2
Camphor	NA	NA
Caprolactam	NA	NA
Carbazole	< 2	< 2

Chrysene

Cumene / Isopropylbenzene / (1-Methylethyl)benzene	< 2	< 2
Di-N-butyl phthalate	NA	NA
	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Semivolatiles Organic Compounds

Di-N-octyl phthalate < 2 < 2  
Dibenzo[A,H]anthracene < 2 < 2  
Dibenzofuran < 2 < 2  
Diethylphthalate < 2 j < 2 j  
Dimethylphthalate < 2 < 2

Fluoranthene < 2 < 2  
Fluorene < 2 < 2  
Heptacosane 7 S NA  
Hexachlorobenzene < 2 < 2  
Hexachlorobutadiene < 2 < 2

Hexachlorocyclopentadiene < 10 j  
Hexachloroethane < 2 < 2  
Indeno[1,2,3-C,D]pyrene < 2 < 2  
Isophorone < 2 < 2  
N,N-Diethyl-3-methylbenzamide / N,N-Diethyl-m-toluamide 40 S NA

N-Nitrosodi-N-propylamine < 2 < 2  
N-Nitrosodiphenylamine < 2 < 2 j  
Naphthalene < 2 < 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Semivolatile Organic Compounds

Nitrobenzene < 2 < 2  
Pentachlorophenol < 10 j < 10  
Phenanthrene < 2 < 2  
Phenol < 2 < 2  
Pyrene < 2 < 2

bis (2-Chloroethoxy) methane < 2 < 2  
bis (2-Chloroethyl) ether < 2 < 2  
bis (2-Chloroisopropyl) ether < 2 < 2  
n-Propylbenzene /Propylbenzene / 1-Phenylpropane NA NA

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .007 < .007 j  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .005 < .005 j  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .007 < .007 j  
Aldrin < .005 < .005 j  
Dieldrin < .005 < .005 j

Dimethoate < .25 j < .25 j  
Endosulfan sulfate < .005 < .005 j  
Endrin < .005 < .005 j  
Endrin aldehyde < .022 < .022 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Pesticides/PCBs

Endrin ketone < .006 j < .006 j  
Heptachlor < .005 < .005 j  
Heptachlor epoxide < .005 < .005 j  
Lindane < .005 < .005 j  
Methoxychlor < .009 < .009 j

PCB 1016 < .13 < .13 j  
PCB 1221 < .13 < .13 j  
PCB 1232 < .13 < .13 j  
PCB 1242 < .13 < .13 j  
PCB 1248 < .13 < .13 j

PCB 1254 < .13 < .13 j  
PCB 1260 < .13 < .13 j  
Toxaphene < .6 j  
alpha-Benzenehexachloride < .005 < .005 j  
alpha-Chlordane < .005 < .005 j

alpha-Endosulfan/Endosulfan I < .005 j  
beta-Benzenehexachloride < .005 j  
beta-Endosulfan/Endosulfan II < .005 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes	MW23	MW25
Pesticides/PCBs		
delta-Benzenhexachloride	< .005	< .005 j
gamma-Chlordane	< .005	< .005 j
Herbicides		
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1 j	< .1 j
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1
245T	< .1	< .1
245TP	< .1	< .1
Dalapon	< .1	< .1
Dicamba	< .1	< .1
Dichloroprop	< .1	< .1
Dinoseb	< .1	< .1
MCPA	< 3	< 3
MCP	< 3	< 3
Metals		
Aluminum	4160	8180
Aluminum (Filtered)	< 40 F	< 40 F
Antimony	< 3	< 3
Antimony (Filtered)	< 3 F	< 3 F
Arsenic	4.7	31.4
Arsenic (Filtered)	< 2.5 F	6.5 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Metals

Barium	143	589
Barium (Filtered)	113 F	503 F
Beryllium	< 5 /J	< 5 /J
Beryllium (Filtered)	< 5 F/J	< 5 F/J
Boron	< 50	345
Cadmium	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F
Calcium	116000	197000
Calcium (Filtered)	94600 F	153000 F
Chromium	10.7	24.3
Chromium (Filtered)	< 10 F	< 10 F
Cobalt	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F
Copper	6.7	16.6
Copper (Filtered)	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5
Iron	6640	19500
Iron (Filtered)	< 45 F	899 F

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D38.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Metals

Lead	3.6	bj	9.6	j
Lead (Filtered)	< 2	Fj	< 2	Fj
Magnesium	43800		69500	
Magnesium (Filtered)	37900	F	57500	F
Manganese	305		500	
Manganese (Filtered)	193	F	221	F
Mercury	< .2		< .2	
Nickel	< 15		24.2	
Nickel (Filtered)	< 15	F	< 15	F
Potassium	2480		3930	
Potassium (Filtered)	1120	F	2190	F
Selenium	< 2.5	j	< 2.5	j
Selenium (Filtered)	< 2.5	Fj	< 2.5	Fj
Silver	< 5		< 5	
Silver (Filtered)	< 5	F	< 5	F
Sodium	13900		32100	
Sodium (Filtered)	14100	F	32300	F
Thallium	< 2.5	j	< 2.5	j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1

Table D3B.  
Background Groundwater Samples Analytical Results  
Sites MW18, MW20, MW21, MW22, MW23, and MW25

Sample Name: MW23 MW25  
Depth (feet): 14 11  
Sample Date: 01/28/94 01/30/94

Analytes

Metals

Thallium (Filtered)	< 2.5 FJ	< 2.5 FJ
Vanadium	< 10 /J	14.8 /J
Vanadium (Filtered)	< 10 F/J	< 10 F/J
Zinc	21.7	51.7
Zinc (Filtered)	< 20 F	< 20 F

Landfill Parameters

Alkalinity	390000 J	410000 J
Ammonia	< 50 J	75 bj
Biological oxygen demand	< 1000 rr	1000 j
Chemical oxygen demand	< 5000 j	11000 j
Chloride	11000	100000

Fluoride

Nitrite, Nitrate -- Non-Specific	< 500 rr	710 rr
Sulfate	< 20	24.8 b
Total Organic Carbon	58000	15000 b
Total dissolved solids	1400 bj	4800 j
	490000 j	770000 j

Total recoverable phenolics

	2.51 b	2.25 b
--	--------	--------

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in table C1



Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name:	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Depth (feet):	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2
2-Chloroethyl(vinyl ether	< 10 rr	< 10 rr	< 10 rr	< 10 rr
Acetic acid, vinyl ester	< 10	< 10	< 10	< 10
Acetone	< 10	< 10 j	< 10 j	< 10 j
Benzene	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name: Depth (feet): Sample Date:	SMBKGSW001 0 03/09/94	SMBKGSW002 0 03/08/94	SMBKGSW003 0 03/04/94	SMBKGSW004 0 03/03/94
Analytes				
-----				
Volatiles Organic Compounds				
Chlorobenzene	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2
Chloromethane	< 2 j	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2
Methyl-N-butyl ketone	< 10 j	< 10 rr	< 10 rr	< 10 rr
Methylene chloride	< 10	< 10	< 10	< 10
Methylene ketone/2-Butanone	< 10 rr	< 10 rr	NA	NA
Methylethyl ketone/2-Butanone	NA	NA	< 10 j	< 10 j
Methylisobutyl ketone	< 10	< 10	< 10 j	< 10 j
Styrene	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name:	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Depth (feet):	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94
-----				
Analytes				
-----				
Volatile Organic Compounds				
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2
-----				
Semivolatle Organic Compounds				
1,2,4-Trichlorobenzene	< 2	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 10	< 10	< 2	< 2
-----				
2,4,6-Trichlorophenol	< 10	< 10	< 2	< 2
2,4-Dichlorophenol	< 2	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2
-----				
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2	< 2
2-Methylnaphthalene	NA	NA	< 2	< 2
2-Methylnaphthanene	< 2	< 2	NA	NA

-----

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name: Depth (feet): Sample Date:	SMBKGSW001 0 03/09/94	SMBKGSW002 0 03/08/94	SMBKGSW003 0 03/04/94	SMBKGSW004 0 03/03/94
Analytes				
Semivolatile Organic Compounds				
2-Methylphenol	< 2	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10	< 10	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2	< 2	< 2
3-Nitroaniline	< 10	< 10	< 10	< 10
4,6-Dinitro-2-cresol	< 20	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2	< 2
4-Methylphenol	< 2	< 2	< 2	< 2
4-Nitroaniline	< 10	< 10	< 10	< 10
4-Nitrophenol	< 20	< 20	< 20	< 20
Acenaphthene	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2	< 2
Benzo[A]anthracene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name: Depth (feet): Sample Date:	SMBKGSW001 0 03/09/94	SMBKGSW002 0 03/08/94	SMBKGSW003 0 03/04/94	SMBKGSW004 0 03/03/94
Analytes				
Semivolatile Organic Compounds				
Benzo[B]fluoranthene	< 2	< 2	< 2	< 2
Benzo[G,H,I]perylene	< 2	< 2	< 2	< 2
Benzo[K]fluoranthene	< 2	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2	< 2	< 2
Benzoic acid	< 20	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	< 2	< 2	< 2	2 JPbj
Butylbenzylphthalate	< 2	< 2	< 2	< 2
Carbazole	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2
Di-N-butyl phthalate	< 2	< 2	< 2	< 2
Di-N-octyl phthalate	< 2	< 2	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2
Diethylphthalate	< 2	< 2	< 2	< 2
Dimethylphthalate	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name: Depth (feet): Sample Date:	SMBKGSW001 0 03/09/94	SMBKGSW002 0 03/08/94	SMBKGSW003 0 03/04/94	SMBKGSW004 0 03/03/94
Analytes				
Semivolatle Organic Compounds				
Fluorene	< 2	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10 j	< 10 j	< 10 j	< 10 j
Hexachloroethane	< 2	< 2	< 2	< 2
Indeno[1,2,3-C,D]pyrene	< 2	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2	< 2	< 2
Naphthalene	< 2	< 2	< 2	< 2
Nitrobenzene	< 2	< 2	< 2	< 2
Pentachlorophenol	< 10	< 10	< 10	< 10
Phenanthrene	< 2	< 2	< 2	< 2
Phenol	< 2	< 2	< 2	< 2
Pyrene	< 2	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	< 2	< 2	< 2
bis (2-Chloroethyl) ether	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name:	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Depth (feet):	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94
Analytes				
-----				
Semivolatile Organic Compounds				
bis (2-Chloroisopropyl) ether	< 2	< 2	< 2 j	< 2 j
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	< .007	< .007
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005	< .005	< .005	< .005
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007	< .007	< .007 j	< .007 j
Aldrin	< .005 j	< .005 j	< .005 j	< .005 j
Dieldrin	< .005 j	< .005 j	< .005 j	< .005 j
Dimethoate	< .25 j	< .25 j	< .25 j	< .25 j
Endosulfan sulfate	< .005	< .005	< .005	< .005
Endrin	< .005	< .005	< .005	< .005
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .006	< .006	< .006	< .006
Heptachlor	< .005	< .005	< .005	< .005
Heptachlor epoxide	< .005	< .005	< .005	< .005
Lindane	< .005	< .005	< .005	< .005
Methoxychlor	< .009	< .009	< .009	< .009
PCB 1016	< .13	< .13	< .13	< .13
PCB 1221	< .13	< .13	< .13	< .13

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name: Depth (feet): Sample Date:	SMBKGSW001 0 03/09/94	SMBKGSW002 0 03/08/94	SMBKGSW003 0 03/04/94	SMBKGSW004 0 03/03/94
Analytes				
Pesticides/PCBs				
PCB 1232	< .13	< .13	< .13	< .13
PCB 1242	< .13	< .13	< .13	< .13
PCB 1248	< .13	< .13	< .13	< .13
PCB 1254	< .13	< .13	< .13	< .13
PCB 1260	< .13	< .13	< .13	< .13
Toxaphene	< .6	< .6	< .6	< .6
alpha-Benzenehexachloride	< .005	< .005	< .005	< .005
alpha-Chlordane	< .005	< .005	< .005	< .005
alpha-Endosulfan/Endosulfan I	< .005	< .005	< .005	< .005
beta-Benzenehexachloride	< .005	< .005	< .005	< .005
beta-Endosulfan/Endosulfan II	< .005	< .005	< .005	< .005
delta-Benzenehexachloride	< .005	< .005	< .005	< .005
gamma-Chlordane	< .005	< .005	< .005	< .005
Herbicides				
(4-Chloro-2-methylphenoxy)acetic acid	< 3	< 3	NA	NA
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1	< .1	< .1	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	< .1
2-(2,4-Dichlorophenoxy)propionic acid	< .1	< .1	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name: Depth (feet): Sample Date:	SMBKGSW001 0 03/09/94	SMBKGSW002 0 03/08/94	SMBKGSW003 0 03/04/94	SMBKGSW004 0 03/03/94
Analytes				
Herbicides				
2-(4-Chloro-2-methylphenoxy)propanoic acid	< 3	< 3	NA	NA
245T	< .1	< .1	< .1	< .1
245TP	< .1	< .1	< .1	< .1
Dalapon	< .1	< .1	< .1	< .1
Dicamba	< .1	< .1	< .1	< .1
Dichloroprop	NA	NA	< .1	< .1
Dinoseb	< .1	< .1	< .1	< .1
MCPA	NA	NA	< 3	< 3
MCPP	NA	NA	< 3	< 3
Metals				
Aluminum	139	113	49.1	41.2
Aluminum (Filtered)	< 40 F	< 40 F	< 40 F	< 40 F
Antimony	< 3 J	< 3 J	< 3	< 3
Antimony (Filtered)	5.7 Fj	6.2 Fj	7.4 F	6.8 F
Arsenic	< 2.5	< 2.5	< 2.5	< 2.5
Arsenic (Filtered)	< 2.5 F	< 2.5 F	< 2.5 F	< 2.5 F
Barium	53.2	66.5	76.1	41
Barium (Filtered)	50.2 F	65 F	73.5 F	38.9 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name:	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Depth (feet):	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94
-----				
Analytes				
-----				
Metals				
Beryllium	< 5	< 5	< 5	< 5
Beryllium (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Cadmium	< 5	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Calcium	63700	70500	84700	65500
Calcium (Filtered)	62800 F	70500 F	84000 F	63400 F
Chromium	< 10	< 10	< 10	< 10
Chromium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F
Copper	< 5	< 5	< 5	< 5
Copper (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5	< 2.5	< 2.5
Iron	182	212	290	87.9
Iron (Filtered)	< 45 F	< 45 F	< 45 F	< 45 F
Lead	< 2	< 2	< 2	< 2
Lead (Filtered)	< 2 F	< 2 F	< 2 Fj	< 2 Fj

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name:	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Depth (feet):	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94
Analytes				
-----				
Metals				
Magnesium	21300	24700 /I	30400 /I	19400 /I
Magnesium (Filtered)	21100 F	25000 F/I	30200 F/I	18800 F/I
Manganese	26.5	52.3	49.6	22.9
Manganese (Filtered)	13.7 F	45.7 F	45.1 F	5.61 F
Mercury	< .2	< .2 j	< .2 j	< .2 j
Mercury (Filtered)	< .2 F	< .2 Fj	< .2 Fj	< .2 Fj
Nickel	< 15	< 15	< 15	< 15
Nickel (Filtered)	< 15 F	< 15 F	< 15 F	< 15 F
Potassium	1880	1300	953	1990
Potassium (Filtered)	1260 Fb	1520 F	2500 F	2900 F
Selenium	< 2.5 /J	< 2.5 /J	< 2.5 j	< 2.5 j
Selenium (Filtered)	< 2.5 F/J	< 2.5 F/J	< 2.5 Fj	< 2.5 Fj
Silver	< 5	< 5	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Sodium	12800	9950	68000	45000
Sodium (Filtered)	12700 F	10100 F	67100 F	43400 F
Thallium	< 2.5	< 2.5	< 2.5 j/JR	< 2.5 j/JR

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4A.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW001, SMBKGSW002, SMBKGSW003  
and SMBKGSW004

Sample Name:	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Depth (feet):	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94
-----				
Analytes				
-----				
Metals				
Thallium (Filtered)	< 2.5 F	< 2.5 F	< 2.5 Fj/JR	< 2.5 Fj/JR
Vanadium	< 10	< 10	< 10	< 10
Vanadium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F
Zinc	< 20	< 20	< 20	< 20
Zinc (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F
-----				
Landfill Parameters				
Ammonia	74.9 b	< 50	< 50	< 50
Nitrite, Nitrate -- Non-Specific	1600 j	2400 j	447 j	425 j

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
-----				
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2
2-Chloroethylvinyl ether	< 10 rr	< 10 rr	< 10 rr	< 10 rr
Acetic acid, vinyl ester	< 10	< 10	< 10	< 10
Acetone	< 10 j	< 10 j	< 10 j	29 j
Benzene	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
-----				
Analytes				
-----				
Volatile Organic Compounds				
Chlorobenzene	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2
-----				
Ethylbenzene	< 2	< 2	< 2	< 2
Methyl-N-butyl ketone	< 10 rr	< 10 rr	< 10 rr	< 10 rr
Methylene chloride	< 10	< 10	< 10	< 10
Methylene ketone/2-Butanone	NA	NA	< 10 rr	< 10 rr
Methylethyl ketone/2-Butanone	< 10 j	< 10 j	NA	NA
-----				
Methylisobutyl ketone	< 10 j	< 10 j	< 10	< 10
Styrene	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2
-----				
Vinyl chloride	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D48.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
-----				
Analytes				
-----				
Volatile Organic Compounds				
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2
-----				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< 2	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2	< 10	< 10
-----				
2,4,6-Trichlorophenol	< 2	< 2	< 10	< 10
2,4-Dichlorophenol	< 2	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2
-----				
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2	< 2
2-Methylnaphthalene	< 2	< 2	< 2	< 2
2-Methylphenol	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
<hr/>				
Analytes				
<hr/>				
Semivolatile Organic Compounds				
2-Nitroaniline	< 10	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10 j	< 10 j	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2	< 2	< 2
3-Nitroaniline	< 10 j	< 10 j	< 10 j	< 10 j
<hr/>				
4,6-Dinitro-2-cresol	< 20	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2	< 2
4-Chloroaniline	< 2 j	< 2 j	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2	< 2
4-Methylphenol	< 2	< 2	< 2	< 2
<hr/>				
4-Nitroaniline	< 10 j	< 10 j	< 10	< 10
4-Nitrophenol	< 20	< 20	< 20	< 20
Acenaphthene	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2	< 2
<hr/>				
Benzo[A]anthracene	< 2	< 2	< 2	< 2
Benzo[B]fluoranthene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
<b>Analytes</b>				
-----				
<b>Semivolatile Organic Compounds</b>				
Benzo[G,H,I]perylene	< 2	< 2	< 2	< 2
Benzo[K]fluoranthene	< 2	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2	< 2	< 2
Benzoic acid	< 20	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	< 2 j	2.3 bj	< 2	3.2 Bb
Butylbenzylphthalate	< 2	< 2	< 2	< 2
Carbazole	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2
Di-N-butyl phthalate	< 2 j	< 2 j	< 2	< 2
Di-N-octyl phthalate	< 2 j	< 2 j	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2
Diethylphthalate	< 2	< 2	< 2	< 2
Dimethylphthalate	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name: Depth (feet): Sample Date:	SMBKGSW005 0 03/03/94	SMBKGSW006 0 03/04/94	SMBKGSW007 0 03/06/94	SMBKGSW008 0 03/06/94
Analytes				
Semivolatile Organic Compounds				
Hexachlorobenzene	< 2	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10 j	< 10 j	< 10 j	< 10 j
Hexachloroethane	< 2	< 2	< 2	< 2
Indeno[1,2,3-c,d]pyrene	< 2	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2	< 2
Myristic acid / Tetradecanoic acid	NA	NA	NA	5 S
N-Nitrosodi-N-propylamine	< 2	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2	< 2	< 2
Naphthalene	< 2	< 2	< 2	< 2
Nitrobenzene	< 2	< 2	< 2	< 2
Palmitic acid / Hexadecanoic acid	NA	NA	NA	20 S
Pentachlorophenol	< 10	< 10	< 10	< 10
Phenanthrene	< 2	< 2	< 2	< 2
Phenol	< 2	< 2	< 2	< 2
Pyrene	< 2	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name: Depth (feet): Sample Date:	SMBKGSW005 0 03/03/94	SMBKGSW006 0 03/04/94	SMBKGSW007 0 03/06/94	SMBKGSW008 0 03/06/94
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroethyl) ether	< 2	< 2	< 2	< 2
bis (2-Chloroisopropyl) ether	< 2 j	< 2 j	< 2	< 2
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	< .007	< .007
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005	< .005	< .005	< .005
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007 j	< .007 j	< .007 j	< .007 j
Aldrin	< .005 j	< .005 j	< .005 j	< .005 j
Dieldrin	< .005 j	< .005 j	< .005 j	< .005 j
Dimethoate	< .25 j	< .25 j	< .25 j	< .25 j
Endosulfan sulfate	< .005	< .005	< .005	< .005
Endrin	< .005	< .005	< .005	< .005
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .006	< .006	< .006	< .006
Heptachlor	< .005	< .005	< .005	< .005
Heptachlor epoxide	< .005	< .005	< .005	< .005
Lindane	< .005	< .005	< .005	< .005
Methoxychlor	< .009	< .009	< .009	< .009
PCB 1016	< .13	< .13	< .13	< .13

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name: Depth (feet): Sample Date:	SMBKGSW005 0 03/03/94	SMBKGSW006 0 03/04/94	SMBKGSW007 0 03/06/94	SMBKGSW008 0 03/06/94
Analytes				
Pesticides/PCBs				
PCB 1221	< .13	< .13	< .13	< .13
PCB 1232	< .13	< .13	< .13	< .13
PCB 1242	< .13	< .13	< .13	< .13
PCB 1248	< .13	< .13	< .13	< .13
PCB 1254	< .13	< .13	< .13	< .13
PCB 1260	< .13	< .13	< .13	< .13
Toxaphene	< .6	< .6	< .6	< .6
alpha-Benzenehexachloride	< .005	< .005	< .005	< .005
alpha-Chlordane	< .005	< .005	< .005	< .005
alpha-Endosulfan/Endosulfan I	< .005	< .005	< .005	< .005
beta-Benzenehexachloride	< .005	< .005	< .005	< .005
beta-Endosulfan/Endosulfan II	< .005	< .005	< .005	< .005
delta-Benzenehexachloride	< .005	< .005	< .005	< .005
gamma-Chlordane	< .005	< .005	< .005	< .005
Herbicides				
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1	< .1	< .1	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	< .1
245T	< .1	< .1	< .1	< .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
<hr/>				
Analytes				
<hr/>				
Herbicides				
245TP	< .1	< .1	< .1	< .1
Dalapon	< .1	< .1	< .1	< .1
Dicamba	< .1	< .1	< .1	< .1
Dichloroprop	< .1	< .1	< .1	< .1
Dinoseb	< .1	< .1	< .1	< .1
<hr/>				
MCPA	< 3	< 3	< 3	< 3
MCPp	< 3	< 3	< 3	< 3
<hr/>				
Metals				
Aluminum	83.9	244	< 40	225
Aluminum (Filtered)	< 40	40.5	< 40	< 40
Antimony	< 3	< 3	< 3	< 3
Antimony (Filtered)	7.7	6.5	6.1	7.4
Arsenic	< 2.5	< 2.5	< 2.5	< 2.5
<hr/>				
Arsenic (Filtered)	< 2.5	< 2.5	< 2.5	< 2.5
Barium	39.4	73.3	53.3	108
Barium (Filtered)	39.9	71.9	53	92.9
Beryllium	< 5	< 5	< 5	< 5
Beryllium (Filtered)	< 5	< 5	< 5	< 5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D48.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name: Depth (feet): Sample Date:	SMBKGSW005 0 03/03/94	SMBKGSW006 0 03/04/94	SMBKGSW007 0 03/06/94	SMBKGSW008 0 03/06/94
Analytes				
Metals				
Cadmium	< 5	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Calcium	79000	96600	95900	98900
Calcium (Filtered)	75100 F	95200 F	95100 F	94100 F
Chromium	< 10	< 10	< 10	< 10
Chromium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F
Copper	< 5	< 5	< 5	< 5
Copper (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5	< 2.5	< 2.5
Iron	179	576	46.8	1520
Iron (Filtered)	< 45 F	63.3 Fb	< 45 Fb	< 45 F
Lead	< 2 J	3.2 J	< 2 J	< 2 J
Lead (Filtered)	< 2 Fj	< 2 Fj	< 2 Fj	< 2 Fj
Magnesium	25600 /1	29900 /1	33200 /1	34500 /1
Magnesium (Filtered)	24500 F/1	30000 F/1	33200 F/1	33000 F/1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
Analytes				
-----				
Metals				
Manganese	40.3	59.5	< 5	177
Manganese (Filtered)	30.7 F	36.8 F	< 5 F	157 F
Mercury	< .2 J	< .2 J	< .2 J	< .2 J
Mercury (Filtered)	< .2 Fj	< .2 Fj	< .2 Fj	< .2 Fj
Nickel	< 15	< 15	< 15	< 15
Nickel (Filtered)	< 15 F	< 15 F	< 15 F	< 15 F
Potassium	1600	1910	743 b	2830
Potassium (Filtered)	2040 F	1930 F	1150 F	2680 F
Selenium	< 2.5 J	< 2.5 J	< 2.5 J	< 2.5 J
Selenium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj	< 2.5 Fj
Silver	< 5	< 5	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Sodium	13900	72400	14200	66000
Sodium (Filtered)	13300 F	74000 F	14400 F	63800 F
Thallium	< 2.5 j/JR	< 2.5 j/JR	< 2.5 j/JR	< 2.5 j/JR
Thallium (Filtered)	< 2.5 Fj/JR	< 2.5 Fj/JR	< 2.5 Fj/JR	< 2.5 Fj/JR
Vanadium	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data qualifiers are defined in Table C1

Table D4B.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW005, SMBKGSW006, SMBKGSW007  
and SMBKGSW008

Sample Name:	SMBKGSW005	SMBKGSW006	SMBKGSW007	SMBKGSW008
Depth (feet):	0	0	0	0
Sample Date:	03/03/94	03/04/94	03/06/94	03/06/94
Analytes				
Metals				
Vanadium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F
Zinc	< 20	< 20	< 20	22.1
Zinc (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F
Landfill Parameters				
Ammonia	< 50 J	< 50 J	< 50 J	898 J
Nitrite, Nitrate -- Non-Specific	206 J	480 J	275	710 J

Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



**Note:** Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name: SMBKGSW009 SMBKGSW010 SMBKGSW011  
Depth (feet): 0 0 0  
Sample Date: 03/08/94 03/07/94 03/02/94

Analytes

-----  
Volatile Organic Compounds

Chloroethane	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2

Methyl-N-butyl ketone	< 10	rr	< 10	rr
Methylene chloride	< 10	< 10	< 10	< 10
Methylene ketone/2-Butanone	< 10	rr	< 10	rr
Methylethyl ketone/2-Butanone	NA	NA	NA	< 10
Methylisobutyl ketone	< 10	< 10	< 10	< 10

Styrene	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2
Toluene	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2
Vinyl chloride	< 2	< 2	< 2

Xylenes, total combined	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name: Depth (feet): Sample Date:	SMBKGSW009 0 03/08/94	SMBKGSW010 0 03/07/94	SMBKGSW011 0 03/02/94
Analytes			
Semivolatile Organic Compounds			
1,2,4-Trichlorobenzene	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 10	< 10	< 2
2,4,6-Trichlorophenol	< 10	< 10	< 2
2,4-Dichlorophenol	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2	< 2
2-(2-N-Butoxyethoxy) ethanol	NA	6 S	NA
2-Chloronaphthalene	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2
2-Methylnaphthalene	NA	< 2	< 2
2-Methylnaphthanene	< 2	NA	NA
2-Methylphenol	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name: SMBKGSW009 SMBKGSW010 SMBKGSW011  
Depth (feet): 0 0 0  
Sample Date: 03/08/94 03/07/94 03/02/94

Analytes

Semivolatile Organic Compounds

2-Nitrophenol	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10	< 10	< 10 j
3-Methyl-4-chlorophenol	< 2	< 2	< 2
3-Nitroaniline	< 10 j	< 10 j	< 10 j
4,6-Dinitro-2-cresol	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2	< 2 j
4-Chlorophenylphenyl ether	< 2	< 2	< 2
4-Methylphenol	< 2	< 2	< 2
4-Nitroaniline	< 10	< 10	< 10 j
4-Nitrophenol	< 20	< 20	< 20
Acenaphthene	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2
Benzo [A] anthracene	< 2	< 2	< 2
Benzo [B] fluoranthene	< 2	< 2	< 2
Benzo [G,H,I] perylene	< 2	< 2	< 2
Benzo [K] fluoranthene	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name:	SMBKGSW009	SMBKGSW010	SMBKGSW011
Depth (feet):	0	0	0
Sample Date:	03/08/94	03/07/94	03/02/94
Analytes			
Semivolatile Organic Compounds			
Benzo[a]pyrene	< 2	< 2	< 2
Benzoic acid	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	7.8 b	3.9 Bb	< 2 j
Butylbenzylphthalate	< 2	< 2	< 2
Carbazole	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2
Di-N-butyl phthalate	< 2	< 2	< 2 j
Di-N-octyl phthalate	< 2	< 2	< 2 j
Dibenzo[A,H]anthracene	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2
Diethylphthalate	< 2	2.7	< 2
Dimethylphthalate	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10 j	< 10 j	< 10 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name: SMBKGSW009 SMBKGSW010 SMBKGSW011  
Depth (feet): 0 0 0  
Sample Date: 03/08/94 03/07/94 03/02/94

Analytes

Semivolatiles Organic Compounds

Hexachloroethane < 2 < 2 < 2  
Indeno[1,2,3-C,D]pyrene < 2 < 2 < 2  
Isophorone < 2 < 2 < 2  
N-Nitrosodi-N-propylamine < 2 < 2 < 2  
N-Nitrosodiphenylamine < 2 < 2 < 2

Naphthalene < 2 < 2 < 2  
Nitrobenzene < 2 < 2 < 2  
Palmitic acid / Hexadecanoic acid NA 10 S NA  
Pentachlorophenol < 10 < 10 < 10  
Phenanthrene < 2 < 2 < 2

Phenol < 2 < 2 < 2  
Pyrene < 2 < 2 < 2  
Stearic acid / Octadecanoic acid / Promulsin / Provisco NA 9 S NA  
bis (2-Chloroethoxy) methane < 2 < 2 < 2  
bis (2-Chloroethyl) ether < 2 < 2 < 2

bis (2-Chloroisopropyl) ether < 2 < 2 < 2 j

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane < .007 < .007 < .007  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane < .005 < .005 < .005

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name:	SMBKGSW009	SMBKGSW010	SMBKGSW011
Depth (feet):	0	0	0
Sample Date:	03/08/94	03/07/94	03/02/94
Analytes			
-----			
Pesticides/PCBs			
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene			
Aldrin	< .007	< .007 j	< .007 j
Dieldrin	< .005 j	< .005 j	< .005 j
Dimethoate	< .005 j	< .005 j	< .005 j
Endosulfan sulfate	< .25 j	< .25 j	< .25 j
	< .005	< .005	< .005
Endrin	< .005	< .005	< .005
Endrin aldehyde	< .022	< .022	< .022
Endrin ketone	< .006	< .006	< .006
Heptachlor	< .005	< .005	< .005
Heptachlor epoxide	< .005	< .005	< .005
Lindane	< .005	< .005	< .005
Methoxychlor	< .009	< .009	< .009
PCB 1016	< .13	< .13	< .13
PCB 1221	< .13	< .13	< .13
PCB 1232	< .13	< .13	< .13
PCB 1242	< .13	< .13	< .13
PCB 1248	< .13	< .13	< .13
PCB 1254	< .13	< .13	< .13

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name:	SMBKGSW009	SMBKGSW010	SMBKGSW011
Depth (feet):	0	0	0
Sample Date:	03/08/94	03/07/94	03/02/94
Analytes			
-----			
Pesticides/PCBs			
PCB 1260	< .13	< .13	< .13
Toxaphene	< .6	< .6	< .6
alpha-Benzenehexachloride	< .005	< .005	< .005
alpha-Chlordane	< .005	< .005	< .005
alpha-Endosulfan/Endosulfan I	< .005	< .005	< .005
beta-Benzenehexachloride	< .005	< .005	< .005
beta-Endosulfan/Endosulfan II	< .005	< .005	< .005
delta-Benzenehexachloride	< .005	< .005	< .005
gamma-Chlordane	< .005	< .005	< .005
Herbicides			
(4-Chloro-2-methylphenoxy)acetic acid	< 3	NA	NA
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1	< .1	.11 C
2,4-DB / 4-(2,4-dichlorophenoxy)butyric acid	< .1	< .1	< .1
2-(2,4-dichlorophenoxy)propionic acid	< .1	NA	NA
2-(4-chloro-2-methylphenoxy)propanoic acid	< 3	NA	NA
245T	< .1	< .1	< .1
245TP	< .1	< .1	< .1
Dalapon	< .1	< .1	< .1
Dicamba	< .1	< .1	< .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C



Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name:	SMBKGSW009	SMBKGSW010	SMBKGSW011
Depth (feet):	0	0	0
Sample Date:	03/08/94	03/07/94	03/02/94
-----			
Analytes			
-----			
Herbicides			
Dichloroprop	NA	< .1	< .1
Dinoseb	< .1	< .1	< .1
MCPA	NA	< 3	< 3
MCPB	NA	< 3	< 3
-----			
Metals			
Aluminum	< 40	353	< 40
Aluminum (Filtered)	509 F	< 40 F	< 40 F
Antimony	< 3	< 3	< 3
Antimony (Filtered)	6.4 Fj	5.5 F	6.2 F
Arsenic	4.1	< 2.5	< 2.5
-----			
Arsenic (Filtered)	2.6 Fb	< 2.5 F	< 2.5 F
Barium	300	127	51.3
Barium (Filtered)	283 F	112 F	49.4 F
Beryllium	< 5	< 5	< 5
Beryllium (Filtered)	< 5 F	< 5 F	< 5 F
-----			
Cadmium	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 F
Calcium	119000	99500	85700
Calcium (Filtered)	118000 F	97900 F	82600 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name:	SMBKGSW009	SMBKGSW010	SMBKGSW011
Depth (feet):	0	0	0
Sample Date:	03/08/94	03/07/94	03/02/94
Analytes			
-----			
Metals			
Chromium	< 10	< 10	< 10
Chromium (Filtered)	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F	< 20 F
Copper	< 5	< 5	< 5
Copper (Filtered)	< 5 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5	< 2.5
Iron	1150	1370	146
Iron (Filtered)	< 45 F	< 45 F	< 45 F
Lead	< 2	4.3 J	< 2 J
Lead (Filtered)	< 2 F	< 2 Fj	< 2 Fj
Magnesium	38500 /I	33800 /I	25400 /I
Magnesium (Filtered)	38100 F/I	33700 F/I	24600 F/I
Manganese	77.6	216	91.5
Manganese (Filtered)	76.2 F	203 F	86.2 F
Mercury	< .2 J	< .2 J	< .2 J
Mercury (Filtered)	< .2 Fj	< .2 Fj	< .2 Fj
Nickel	< 15	< 15	< 15

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4C.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW009, SMBKGSW010, SMBKGSW011

Sample Name: SMBKGSW009 SMBKGSW010 SMBKGSW011  
Depth (feet): 0 0 0  
Sample Date: 03/08/94 03/07/94 03/02/94

Analytes

Metals

Nickel (Filtered) < 15 F < 15 F < 15 F  
Potassium 2370 2910 2170  
Potassium (Filtered) 2580 F 3100 F 2150 F  
Selenium < 2.5 /J < 2.5 J < 2.5 J  
Selenium (Filtered) < 2.5 F/J < 2.5 Fj < 2.5 Fj

Silver < 5 < 5 < 5  
Silver (Filtered) < 5 F < 5 F  
Sodium 51200 83500 66200  
Sodium (Filtered) 50000 F 86600 F 62200 F  
Thallium < 2.5 < 2.5 J/JR < 2.5 J/JR

Thallium (Filtered) < 2.5 F < 2.5 Fj/JR < 2.5 Fj/JR  
Vanadium < 10 < 10 < 10  
Vanadium (Filtered) < 10 F < 10 F  
Zinc < 20 22.2 79.6  
Zinc (Filtered) < 20 F < 20 F

Landfill Parameters

Ammonia 109 bj 2100 j < 50 j  
Nitrite, Nitrate -- Non-Specific 323 525 334

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table 1C

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name: Depth (feet): Sample Date:	SMBKGSW012 0 03/02/94	SMBKGSW013 0 03/03/94	SMBKGSW014 0 03/10/94	SMBKGSW015 0 03/11/94
Analytes				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2
2-Chloroethylvinyl ether	< 10 rr	< 10 rr	< 10 rr	< 10 rr
Acetic acid, vinyl ester	< 10	< 10	< 10	< 10
Acetone	< 10 j	< 10 j	< 10	< 10
Benzene	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/03/94	03/10/94	03/11/94
Analytes				
-----				
Volatile Organic Compounds				
Chlorobenzene	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2 j	< 2 j
Dibromochloromethane	< 2	< 2	< 2	< 2
Ethylbenzene				
Methyl-N-butyl ketone	< 2	< 2	< 2	< 2
Methylene chloride	< 10 rr	< 10 rr	< 10 j	< 10 j
Methylene ketone/2-Butanone	< 10	< 10	< 10	< 10
Methylethyl ketone/2-Butanone	NA	NA	< 10 rr	< 10 rr
	< 10 j	< 10 j	NA	NA
Methylisobutyl ketone				
Styrene	< 10 j	< 10 j	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2
Vinyl chloride				
Xylenes, total combined	< 2	< 2	< 2	< 2
	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/03/94	03/10/94	03/11/94
-----				
Analytes				
-----				
Volatile Organic Compounds				
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2
-----				
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	< 2	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2	< 10	< 10
-----				
2,4,6-Trichlorophenol	< 2	< 2	< 10	< 10
2,4-Dichlorophenol	< 2	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2
-----				
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2	< 2
2-Methylnaphthalene	< 2	< 2	NA	NA
2-Methylnaphthanene	NA	NA	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name: Depth (feet): Sample Date:	SMBKGSW012 0 03/02/94	SMBKGSW013 0 03/03/94	SMBKGSW014 0 03/10/94	SMBKGSW015 0 03/11/94
Analytes				
Semivolatile Organic Compounds				
2-Methylphenol	< 2	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10 j	< 10 j	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2	< 2	< 2
3-Nitroaniline	< 10 j	< 10 j	< 10 j	< 10 j
4,6-Dinitro-2-cresol	< 20	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2	< 2
4-Chloroaniline	< 2 j	< 2 j	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2	< 2
4-Methylphenol	< 2	< 2	< 2	< 2
4-Nitroaniline	< 10 j	< 10 j	< 10	< 10
4-Nitrophenol	< 20	< 20	< 20	< 20
Acenaphthene	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2	< 2
Benzo[ <i>a</i> ]anthracene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/03/94	03/10/94	03/11/94
<b>Analytes</b>				
-----				
<b>Semivolatile Organic Compounds</b>				
Benzo[B]fluoranthene	< 2	< 2	< 2	< 2
Benzo[G,H,I]perylene	< 2	< 2	< 2	< 2
Benzo[K]fluoranthene	< 2	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2	< 2	< 2
Benzoic acid	< 20	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	2.4 bj	2.7 bj	120	3.6 b
Butylbenzylphthalate	< 2	< 2	< 2	< 2
Carbazole	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2
Di-N-butyl phthalate	< 2 j	< 2 j	< 2	< 2
Di-N-octyl phthalate	< 2 j	< 2 j	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2
Diethylphthalate	< 2	< 2	< 2	< 2
Dimethylphthalate	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name: Depth (feet): Sample Date:	SMBKGSW012 0 03/02/94	SMBKGSW013 0 03/03/94	SMBKGSW014 0 03/10/94	SMBKGSW015 0 03/11/94
Analytes				
Semivolatile Organic Compounds				
Fluorene	< 2	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10 J	< 10 J	< 10 J	< 10 J
Hexachloroethane	< 2	< 2	< 2	< 2
Indeno[1,2,3-c,d]pyrene	< 2	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2	< 2	< 2
Naphthalene	< 2	< 2	< 2	< 2
Nitrobenzene	< 2	< 2	< 2	< 2
Pentachlorophenol	< 10	< 10	< 10	< 10
Phenanthrene	< 2	< 2	< 2	< 2
Phenol	< 2	< 2	< 2	< 2
Pyrene	< 2	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	< 2	< 2	< 2
bis (2-Chloroethyl) ether	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name: Depth (feet): Sample Date:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
	0	0	0	0
	03/02/94	03/03/94	03/10/94	03/11/94
Analytes				
Semivolatile Organic Compounds				
bis (2-Chloroisopropyl) ether	< 2 j	< 2 j	< 2	< 2
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	< .007	< .007
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005	< .005	< .005	< .005
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007 j	< .007 j	< .007	< .007
Aldrin	< .005 j	< .005 j	< .005 j	< .005 j
Dieldrin	< .005 j	< .005 j	< .005 j	< .005 j
Dimethoate	< .25 j	< .25 j	< .25 j	< .25 j
Endosulfan sulfate	< .005	< .005	< .005	< .005
Endrin	< .005	< .005	< .005	< .005
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .006	< .006	< .006	< .006
Heptachlor	< .005	< .005	< .005	< .005
Heptachlor epoxide	< .005	< .005	< .005	< .005
Lindane	< .005	< .005	< .005	< .005
Methoxychlor	< .009	< .009	< .009	< .009
PCB 1016	< .13	< .13	< .13	< .13
PCB 1221	< .13	< .13	< .13	< .13

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name: Depth (feet): Sample Date:	SMBKGSW012 0 03/02/94	SMBKGSW013 0 03/03/94	SMBKGSW014 0 03/10/94	SMBKGSW015 0 03/11/94
Analytes				
Pesticides/PCBs				
PCB 1232	< .13	< .13	< .13	< .13
PCB 1242	< .13	< .13	< .13	< .13
PCB 1248	< .13	< .13	< .13	< .13
PCB 1254	< .13	< .13	< .13	< .13
PCB 1260	< .13	< .13	< .13	< .13
Toxaphene	< .6	< .6	< .6	< .6
alpha-Benzenhexachloride	< .005	< .005	< .005	< .005
alpha-Chlordane	< .005	< .005	< .005	< .005
alpha-Endosulfan/Endosulfan I	< .005	< .005	< .005	< .005
beta-Benzenhexachloride	< .005	< .005	< .005	< .005
beta-Endosulfan/Endosulfan II	< .005	< .005	< .005	< .005
delta-Benzenhexachloride	< .005	< .005	< .005	< .005
gamma-Chlordane	< .005	< .005	< .005	< .005
Herbicides				
(4-Chloro-2-methylphenoxy)acetic acid	NA	NA	< 3	< 3
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1	< .1	< .1	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	< .1
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	< .1	< .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4d.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/03/94	03/10/94	03/11/94
Analytes				
Herbicides				
2-(4-Chloro-2-methylphenoxy)propanoic acid	NA	NA	< 3	< 3
245T	< .1	< .1	< .1	< .1
245TP	< .1	< .1	< .1	< .1
Dalapon	< .1	< .1	< .1	< .1
Dicamba	< .1	< .1	< .1	< .1
Dichloroprop				
Dinoseb	< .1	< .1	NA	NA
MCPA	< .1	< .1	< .1	< .1
MCP	< 3	< 3	NA	NA
MCP	< 3	< 3	NA	NA
Metals				
Aluminum	466	123	354	107
Aluminum (Filtered)	< 40 F	< 40 F	< 40 F	< 40 F
Antimony	< 3	< 3	< 3 J	< 3 J
Antimony (Filtered)	6.2 F	6.6 F	7 Fj	5.7 Fj
Arsenic	< 2.5	< 2.5	< 2.5	< 2.5
Arsenic (Filtered)				
Barium	< 2.5 F	< 2.5 F	< 2.5 F	< 2.5 F
Barium (Filtered)	69.1	51.3	48.7	52.8
	66.3 F	50.2 F	45.4 F	50.4 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name: Depth (feet): Sample Date:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
	0	0	0	0
	03/02/94	03/03/94	03/10/94	03/11/94
Analytes				
Metals				
Beryllium	< 5	< 5	< 5	< 5
Beryllium (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Cadmium	< 5	< 5	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Calcium	105000	81100	70500	64000
Calcium (Filtered)	105000 F	81500 F	69000 F	64500 F
Chromium	< 10	< 10	< 10	< 10
Chromium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20	< 20
Cobalt (Filtered)	< 20 F	< 20 F	< 20 F	< 20 F
Copper	< 5	10.4	< 5	< 5
Copper (Filtered)	< 5 F	9.53 F	< 5 F	< 5 F
Cyanide	< 2.5	< 2.5	< 2.5	< 2.5
Iron	640	289	455	153
Iron (Filtered)	< 45 F	101 F	< 45 F	< 45 F
Lead	< 2 J	< 2 J	< 2	< 2
Lead (Filtered)	< 2 Fj	< 2 Fj	< 2 F	< 2 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/03/94	03/10/94	03/11/94
Analytes				
Metals				
Magnesium	29600 /I	24000 /I	24700	21600
Magnesium (Filtered)	29600 F/I	24200 F/I	24200 F	21800 F
Manganese	249	137	62.7	18.7
Manganese (Filtered)	227 F	133 F	39.4 F	6.09 F
Mercury	< .2 J	< .2 J	< .2	< .2
Mercury (Filtered)	< .2 FJ	< .2 FJ	< .2 F	< .2 F
Nickel	< 15	< 15	< 15	< 15
Nickel (Filtered)	< 15 F	< 15 F	< 15 F	< 15 F
Potassium	1080	1700	1100 b	1800
Potassium (Filtered)	1050 F	2250 F	1290 Fb	2050 F
Selenium	< 2.5 J	< 2.5 J	< 2.5 /J	< 2.5 /J
Selenium (Filtered)	< 2.5 FJ	< 2.5 FJ	< 2.5 F/J	< 2.5 F/J
Silver	< 5	< 5	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F	< 5 F	< 5 F
Sodium	6950	55200	27200	12400
Sodium (Filtered)	7020 F	55500 F	26900 F	12600 F
Thallium	< 2.5 J/JR	< 2.5 J/JR	< 2.5	< 2.5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D4D.  
Summary of Base-Wide Surface Water Samples Analytical  
Results, Sites SMBKGSW012, SMBKGSW013, SMBKGSW014  
and SMBKGSW015

Sample Name:	SMBKGSW012	SMBKGSW013	SMBKGSW014	SMBKGSW015
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/03/94	03/10/94	03/11/94
-----				
Analytes				
-----				
Metals				
Thallium (Filtered)	< 2.5 Fj/JR	< 2.5 Fj/JR	< 2.5 F	< 2.5 F
Vanadium	< 10	< 10	< 10	< 10
Vanadium (Filtered)	< 10 F	< 10 F	< 10 F	< 10 F
Zinc	< 20	< 20	< 20	< 20
Zinc (Filtered)	< 20 F	55.3 F	< 20 F	< 20 F
-----				
Landfill Parameters				
Ammonia	< 50 j	< 50 j	< 50 j	91 b
Nitrite, Nitrate -- Non-Specific	< 20	583 j	2500 j	2000 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001 0 03/09/94	SMBKGSE002 0 03/08/94	SMBKGSE003 0 03/04/94	SMBKGSE004 0 03/03/94	SMBKGSE005 0 03/03/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01 rr	< .01 rr	< .01 rr	< .01 rr	< .01 rr
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01 j	< .01 j	< .01	< .01	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01	< .01	< .01 j	< .01 j	< .01 j
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE001 SMBKGSE002 SMBKGSE003 SMBKGSE004 SMBKGSE005  
Depth (feet): 0 0 0 0 0  
Sample Date: 03/09/94 03/08/94 03/04/94 03/03/94 03/03/94

Analytes

Volatile Organic Compounds

Chloroethane < .01 j < .01 j < .01 < .01 < .01  
Chloroform < .01 < .01 < .01 < .01 < .01  
Chloromethane < .01 < .01 < .01 j < .01 j < .01 j  
Dibromochloromethane < .01 < .01 < .01 < .01 < .01  
Ethylbenzene < .01 < .01 < .01 < .01 < .01

Methyl-N-butyl ketone < .01 j < .01 j < .01 j < .01 j < .01 j  
Methylene chloride < .01 < .01 < .01 j < .01 j < .01 j  
Methylene ketone/2-Butanone < .01 j < .01 j < .01 j < .01 j < .01 j  
Methylisobutyl ketone < .01 < .01 < .01 < .01 < .01  
Styrene < .01 < .01 < .01 < .01 < .01

Tetrachloroethene < .01 < .01 < .01 < .01 < .01  
Toluene < .01 < .01 < .01 < .01 < .01  
Trichloroethene < .01 < .01 < .01 < .01 < .01  
Vinyl chloride < .01 < .01 < .01 < .01 < .01  
Xylenes, total combined < .01 < .01 < .01 < .01 < .01

cis-1,3-Dichloropropene < .01 < .01 < .01 < .01 < .01  
trans-1,3-Dichloropropene < .01 < .01 < .01 < .01 < .01

Semivolatile Organic Compounds  
1,2,4-Trichlorobenzene < .14 < .14 < .7 /M < .14 /M < .14 /M

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001 0 03/09/94	SMBKGSE002 0 03/08/94	SMBKGSE003 0 03/04/94	SMBKGSE004 0 03/03/94	SMBKGSE005 0 03/03/94
Analytes					
Semivolatiles Organic Compounds					
1,2-Dichlorobenzene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
1,3-Dichlorobenzene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
1,4-Dichlorobenzene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2,4,5-Trichlorophenol	< .3	< .3	< 2 /M	< .3 /M	< .3 /M
2,4,6-Trichlorophenol	< .3	< .3	< 2 /M	< .3 /M	< .3 /M
2,4-Dichlorophenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2,4-Dimethylphenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2,4-Dinitrophenol	< 1.4	< 1.4	< 7 /M	< 1.4 /M	< 1.4 /M
2,4-Dinitrotoluene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2,6,10,14-Tetramethylpentadecane	NA	NA	NA	NA	.41 S/M
2,6-Dinitrotoluene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2-Chloronaphthalene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2-Chlorophenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2-Methylnaphthalene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2-Methylnaphthanene	NA	NA	NA	NA	NA
2-Methylphenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
2-Nitroaniline	< .67	< .67	< 3 /M	< .67 /M	< .67 /M
2-Nitrophenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001 0 03/09/94	SMBKGSE002 0 03/08/94	SMBKGSE003 0 03/04/94	SMBKGSE004 0 03/03/94	SMBKGSE005 0 03/03/94
Analytes					
Semivolatile Organic Compounds					
3,3'-Dichlorobenzidine	< .67	< .67	< 3 j/M	< .67 j/M	< .67 j/M
3-Methyl-4-chlorophenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
3-Nitroaniline	< .67 j	< .67 j	< 3 /M	< .67 /M	< .67 /M
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 7 /M	< 1.4 /M	< 1.4 /M
4-Bromophenylphenyl ether	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
4-Chloroaniline	< .3	< .3	< 2 j/M	< .3 j/M	< .3 j/M
4-Chlorophenylphenyl ether	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
4-Methylphenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
4-Nitroaniline	< .67	< .67	< 3 /M	< .67 /M	< .67 /M
4-Nitrophenol	< 1.4	< 1.4	< 7 /M	< 1.4 /M	< 1.4 /M
Acenaphthene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Acenaphthylene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Anthracene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Benzo[A]anthracene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Benzo[B]fluoranthene	.24 JP	< .14	< .7 /M	< .14 /M	< .14 /M
Benzo[G,H,I]perylene	< .16	< .16	< .8 j/M	< .16 j/M	< .16 j/M
Benzo[K]fluoranthene	< .14	< .14	< .7 j/M	< .14 j/M	< .14 j/M
Benzo[a]pyrene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name:	SMBKGSE001	SMBKGSE002	SMBKGSE003	SMBKGSE004	SMBKGSE005
Depth (feet):	0	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94	03/03/94

Analytes

Semivolatile Organic Compounds

Benzoic acid	< .14	< .14	< .7	< .14	< .14
Benzyl alcohol	< .14	< .14	< .7	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.32 b	< .14	1 Bb/M	.28 Bb/M	.4 Bb/M
Butylbenzylphthalate	< .14	< .14	< .7	< .14	< .14
Carbazole	< .14	< .14	< .7	< .14	< .14
Chrysene	< .14	< .14	< .7	< .14	< .14
Decane	NA	NA	NA	NA	NA
Di-N-butyl phthalate	< .14	< .14	< .7	< .14	.25 b/M
Di-N-octyl phthalate	< .14	< .14	< .7	< .14	< .14
Dibenz[a,h]anthracene	< .16	< .16	< .8	< .16	< .16
Dibenzofuran	< .14	< .14	< .7	< .14	< .14
Diethylphthalate	< .14	< .14	< .7	< .14	< .14
Dimethylphthalate	< .14	< .14	< .7	< .14	< .14
Dodecane	NA	NA	NA	NA	NA
Fluoranthene	.46	< .14	< .7	< .14	< .14
Fluorene	< .14	< .14	< .7	< .14	< .14
Heptacosane	NA	NA	NA	NA	NA
Heptacosane	1 S	NA	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001 0 03/09/94	SMBKGSE002 0 03/08/94	SMBKGSE003 0 03/04/94	SMBKGSE004 0 03/03/94	SMBKGSE005 0 03/03/94
Analytes					
Semivolatile Organic Compounds					
Heptadecane	NA	NA	NA	NA	NA
Hexachlorobenzene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Hexachlorobutadiene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Hexachlorocyclopentadiene	< 1	< 1	< 5 /M	< 1 /M	< 1 /M
Hexachloroethane	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Hexadecane	NA	NA	NA	NA	NA
Hexadecanoic acid methyl ester	NA	NA	NA	.51 S/M	.41 S/M
Indeno[1,2,3-c,d]pyrene	< .16	< .16	< .8 /M	< .16 /M	< .16 /M
Isophorone	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Myristic acid / Tetradecanoic acid	NA	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
N-Nitrosodiphenylamine	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Naphthalene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Nitrobenzene	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Nonacosane	NA	NA	NA	.64 S/M	NA
Nonane	NA	NA	NA	NA	NA
Octadecane	NA	NA	NA	NA	NA
Palmitic acid / Hexadecanoic acid	.85 S	.52 S	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001 0 03/09/94	SMBKGSE002 0 03/08/94	SMBKGSE003 0 03/04/94	SMBKGSE004 0 03/03/94	SMBKGSE005 0 03/03/94
Analytes					
Semivolatile Organic Compounds					
Pentachlorophenol	< .67	< .67	< 3 /M	< .67 /M	< .67 /M
Pentadecane	NA	NA	NA	NA	NA
Phenanthrene	.29	< .14	< .7 /M	< .14 /M	< .14 /M
Phenol	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
Pyrene	.34	< .14	< .7 /M	< .14 /M	< .14 /M
Tetradecane	NA	NA	NA	NA	NA
Tridecane	NA	NA	NA	NA	NA
Undecane	NA	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
bis (2-Chloroethyl) ether	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
bis (2-Chloroisopropyl) ether	< .14	< .14	< .7 /M	< .14 /M	< .14 /M
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clonaste	NA	NA	NA	.38 S/M	1.4 S/M
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	.00431 C	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	< .003	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	.00431 C	< .003	< .003
Dimethoate	< .033 rr	< .033 rr	< .033 j	< .033 j	< .033 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001 0 03/09/94	SMBKGSE002 0 03/08/94	SMBKGSE003 0 03/04/94	SMBKGSE004 0 03/03/94	SMBKGSE005 0 03/03/94
Analytes					
Pesticides/PCBs					
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE001	SMBKGSE002	SMBKGSE003	SMBKGSE004	SMBKGSE005
	0 03/09/94	0 03/08/94	0 03/04/94	0 03/03/94	0 03/03/94
Analytes					
Pesticides/PCBs					
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
(4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	NA	NA
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01 / N	< .01 / N	< .01	< .01 J	< .01 rr
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA	NA
2-(4-Chloro-2-methylphenoxy)propanoic acid	NA	NA	NA	NA	NA
245T	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
245TP	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
Dalapon	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
Dicamba	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
Dichloroprop	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
Dinoseb	< .01 / N	< .01 / N	< .01	< .01 J	< .01 J
MCPA	< .2 / N	< .2 / N	< .2	< .2 J	< .2 J
MCPP	< .2 / N	< .2 / N	< .2	< .2 J	< .2 J

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE001 SMBKGSE002 SMBKGSE003 SMBKGSE004 SMBKGSE005  
Depth (feet): 0 0 0 0 0  
Sample Date: 03/09/94 03/08/94 03/04/94 03/03/94 03/03/94

Analytes

Metals

Aluminum	5080	3270	3790	3430	5600
Antimony	< 5	< 5	< 5	< 5	< 5
Arsenic	3.72	3.79	5.2	1.5	2.7
Barium	< 39.8	< 39.8	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5	.792
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	40600	34000	62700	66100	28700
Chromium	8.46	5.75	6.54	5.59	8.06
Cobalt	3.55	< 2	6.54	< 2	5.05
Copper	6.77 j/j	4.05 j/j	14.4 j	6.61 j	16.4 j
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	9480	6410	8760	8010	11200
Lead	11.8	< 5	20.9	< 5	11.9
Magnesium	13000	10100	17000	11300	9020
Manganese	271 j	248 j	261 j	203 j	410 j
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	8.46	5.62	10.7 /I	6.23 /I	12.7 /I
Potassium	711	405	771	521	820

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name:	SMBKGSE001	SMBKGSE002	SMBKGSE003	SMBKGSE004	SMBKGSE005
Depth (feet):	0	0	0	0	0
Sample Date:	03/09/94	03/08/94	03/04/94	03/03/94	03/03/94
Analytes					
Metals					
Selenium	< .25 j	< .25 j	< .25 rr	< .25 rr	< .25 rr
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	592	431	562	483	519
Thallium	< 10	< 10	< 10	< 10	< 10
Vanadium	16.9	11.5	12.7	14	15
Zinc	30.5 j/I	19.6 j/I	47.1 /I	31.8 /I	49.2 /I
Landfill Parameters					
Ammonia	81.6 /I	37.4 /I	64.7 /I	53.9 /I	85.5 /I
Nitrite, Nitrate -- Non-Specific	.514	.276 b	< .2 j	.357 b	< .2 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006 0 03/04/94	SMBKGSE007 0 03/06/94	SMBKGSE008 0 03/06/94	SMBKGSE009 0 03/08/94	SMBKGSE010 0 03/07/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01 j	< .01 j	< .01 j	< .01	< .01 j
1,2-Dichloropropane	< .01	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01 rr	< .01 rr	< .01 rr	< .01 rr	< .01 rr
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01 j	< .01
Benzene	< .01	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01	< .01
Carbon disulfide	< .01 j	< .01 j	< .01 j	< .01	< .01 j
Carbon tetrachloride	< .01	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name:	SMBKGSE006	SMBKGSE007	SMBKGSE008	SMBKGSE009	SMBKGSE010
Depth (feet):	0	0	0	0	0
Sample Date:	03/04/94	03/06/94	03/06/94	03/08/94	03/07/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	< .01	< .01	< .01	< .01 j	< .01
Chloroform	< .01	< .01	< .01	< .01	< .01
Chloromethane	< .01 j	< .01 j	< .01 j	< .01	< .01 j
Dibromochloromethane	< .01	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01 j	< .01 j	< .01 j	< .01 j	< .01 j
Methylene chloride	< .01 j	< .01 j	< .01 j	< .01	< .01 j
Methylene ketone/2-Butanone	< .01 j	< .01 j	< .01 j	< .01 j	< .01 j
Methylisobutyl ketone	< .01	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01	< .01
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< .14 /M	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name:	SMBKGSE006	SMBKGSE007	SMBKGSE008	SMBKGSE009	SMBKGSE010
Depth (feet):	0	0	0	0	0
Sample Date:	03/04/94	03/06/94	03/06/94	03/08/94	03/07/94
Analytes					
-----					
Semivolatile Organic Compounds					
1,2-Dichlorobenzene	< .14 /M	< .14	< .14	< .14	< .14
1,3-Dichlorobenzene	< .14 /M	< .14	< .14	< .14	< .14
1,4-Dichlorobenzene	< .14 /M	< .14	< .14	< .14	< .14
2,4,5-Trichlorophenol	< .3 /M	< .3	< .3	< .3	< .3
2,4,6-Trichlorophenol	< .3 /M	< .3	< .3	< .3	< .3
2,4-Dichlorophenol	< .14 /M	< .14	< .14	< .14	< .14
2,4-Dimethylphenol	< .14 /M	< .14	< .14	< .14	< .14
2,4-Dinitrophenol	< 1.4 /M	< 1.4	< 1.4	< 1.4	< 1.4
2,4-Dinitrotoluene	< .14 /M	< .14	< .14	< .14	< .14
2,6,10,14-Tetramethylpentadecane	.89 S/M	NA	NA	NA	NA
2,6-Dinitrotoluene	< .14 /M	< .14	< .14	< .14	< .14
2-Chloronaphthalene	< .14 /M	< .14	< .14	< .14	< .14
2-Chlorophenol	< .14 /M	< .14	< .14	< .14	< .14
2-Methylnaphthalene	< .14 /M	< .14	< .14	< .14	< .14
2-Methylnaphthanene	NA	NA	NA	NA	NA
2-Methylphenol	< .14 /M	< .14	< .14	< .14	< .14
2-Nitroaniline	< .67 /M	< .67	< .67	< .67	< .67
2-Nitrophenol	< .14 /M	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006 0 03/04/94	SMBKGSE007 0 03/06/94	SMBKGSE008 0 03/06/94	SMBKGSE009 0 03/08/94	SMBKGSE010 0 03/07/94
Analytes					
Semivolatile Organic Compounds					
3,3'-Dichlorobenzidine	< .67 j/M	< .67	< .67	< .67	< .67
3-Methyl-4-chlorophenol	< .14 /M	< .14	< .14	< .14	< .14
3-Nitroaniline	< .67 /M	< .67 j	< .67 j	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4 /M	< 1.4	< 1.4	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14 /M	< .14	< .14	< .14	< .14
4-Chloroaniline	< .3 j/M	< .3	< .3	< .3	< .3
4-Chlorophenylphenyl ether	< .14 /M	< .14	< .14	< .14	< .14
4-Methylphenol	< .14 /M	< .14	< .14	< .14	< .14
4-Nitroaniline	< .67 /M	< .67	< .67	< .67	< .67
4-Nitrophenol	< 1.4 /M	< 1.4	< 1.4	< 1.4	< 1.4
Acenaphthene	< .14 /M	< .14	< .14	< .14	< .14
Acenaphthylene	< .14 /M	< .14	< .14	< .14	< .14
Anthracene	< .14 /M	< .14	< .14	< .14	< .14
Benzo[A]anthracene	< .14 /M	< .14	< .14	< .14	< .14
Benzo[B]fluoranthene	< .14 /M	< .14	< .14	< .14	< .14
Benzo[G,H,I]perylene	< .16 j/M	< .16	< .16	< .16	< .16
Benzo[K]fluoranthene	< .14 j/M	< .14	< .14	< .14	< .14
Benzo[a]pyrene	< .14 /M	< .14	< .14	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006 0 03/04/94	SMBKGSE007 0 03/06/94	SMBKGSE008 0 03/06/94	SMBKGSE009 0 03/08/94	SMBKGSE010 0 03/07/94
Analytes					
Semivolatiles Organic Compounds					
Benzoic acid	< .14 /M	< .14	< .14	< .14	< .14
Benzyl alcohol	< .14 /M	< .14	< .14	< .14	< .14
Bis (2-Ethylhexyl) phthalate	.77 BB/M	.54 b	.32 b	.35 b	.29 b
Butylbenzylphthalate	< .14 /M	< .14	< .14	< .14	< .14
Carbazole	< .14 /M	< .14	< .14	< .14	< .14
Chrysene	< .14 /M	< .14	< .14	< .14	< .14
Decane	NA	NA	2.4 S	.74 S	.75 S
Di-N-butyl phthalate	< .14 /M	< .14	< .14	< .14	< .14
Di-N-octyl phthalate	< .14 j/M	< .14	< .14	< .14	< .14
Dibenzo [A,H] anthracene	< .16 j/M	< .16	< .16	< .16	< .16
Dibenzofuran	< .14 /M	< .14	< .14	< .14	< .14
Diethylphthalate	< .14 /M	< .14	< .14	< .14	< .14
Dimethylphthalate	< .14 /M	< .14	< .14	< .14	< .14
Dodecane	NA	NA	2.4 S	.74 S	.87 S
Fluoranthene	< .14 /M	< .14	< .14	< .14	< .14
Fluorene	< .14 /M	< .14	< .14	< .14	< .14
Heptacosane	NA	NA	2.4 S	1.1 S	1 S
	.45 S/M	.42 S	NA	NA	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006 0 03/04/94	SMBKGSE007 0 03/06/94	SMBKGSE008 0 03/06/94	SMBKGSE009 0 03/08/94	SMBKGSE010 0 03/07/94
Analytes					
Semivolatile Organic Compounds					
Heptadecane	.59 S/M	NA	1.1 S	.49 S	.75 S
Hexachlorobenzene	< .14 /M	< .14	< .14	< .14	< .14
Hexachlorobutadiene	< .14 /M	< .14	< .14	< .14	< .14
Hexachlorocyclopentadiene	< 1 /M	< 1	< 1	< 1	< 1
Hexachloroethane	< .14 /M	< .14	< .14	< .14	< .14
Hexadecane	.45 S/M	NA	1.2 S	.62 S	.62 S
Hexadecanoic acid methyl ester	NA	NA	NA	NA	NA
Indeno[1,2,3-C,D]pyrene	< .16 /M	< .16	< .16	< .16	< .16
Isophorone	< .14 /M	< .14	< .14	< .14	< .14
Myristic acid / Tetradecanoic acid	NA	.56 S	1.1 S	NA	.75 S
N-Nitrosodi-N-propylamine	< .14 /M	< .14	< .14	< .14	< .14
N-Nitrosodiphenylamine	< .14 /M	< .14	< .14	< .14	< .14
Naphthalene	< .14 /M	< .14	< .14	< .14	< .14
Nitrobenzene	< .14 /M	< .14	< .14	< .14	< .14
Nonacosane	1 S/M	NA	NA	NA	NA
Nonane	NA	NA	2.4 S	NA	NA
Octadecane	NA	NA	NA	.37 S	.5 S
Palmitic acid / Hexadecanoic acid	NA	.42 S	2.4 S	NA	2.5 S

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006 0 03/04/94	SMBKGSE007 0 03/06/94	SMBKGSE008 0 03/06/94	SMBKGSE009 0 03/08/94	SMBKGSE010 0 03/07/94
Analytes					
Semivolatile Organic Compounds					
Pentachlorophenol	< .67 /M	< .67	< .67	< .67	< .67
Pentadecane	NA	NA	2.4 S	NA	1.1 S
Phenanthrene	< .14 /M	.21	< .14	< .14	< .14
Phenol	< .14 /M	< .14	< .14	< .14	< .14
Pyrene	< .14 /M	< .14	< .14	< .14	< .14
Tetradecane	.59 S/M	NA	2.4 S	1.1 S	1.2 S
Tridecane	.59 S/M	NA	2.4 S	.86 S	1.1 S
Undecane	NA	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14 /M	< .14	< .14	< .14	< .14
bis (2-Chloroethyl) ether	< .14 /M	< .14	< .14	< .14	< .14
bis (2-Chloroisopropyl) ether	< .14 /M	< .14	< .14	< .14	< .14
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clionaste	NA	NA	NA	NA	NA
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	< .003	.00696 C	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003	< .003	< .003	< .003	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	< .003	.00613 C	< .003	< .003
Aldrin	< .003	< .003	< .003	< .003	< .003
Dieldrin	< .003	< .003	< .003	< .003	< .003
Dimethoate	< .033 j	< .033 rr	< .033 rr	< .033 rr	< .033 rr

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006 0 03/04/94	SMBKGSE007 0 03/06/94	SMBKGSE008 0 03/06/94	SMBKGSE009 0 03/08/94	SMBKGSE010 0 03/07/94
Analytes					
Pesticides/PCBs					
Endosulfan sulfate	< .003	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013	< .013
PCB 1232	< .013	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006	SMBKGSE007	SMBKGSE008	SMBKGSE009	SMBKGSE010
	0	0	0	0	0
	03/04/94	03/06/94	03/06/94	03/08/94	03/07/94
Analytes					
Pesticides/PCBs					
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003	< .003
beta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003	< .003
delta-Benzenehexachloride	< .003	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003	< .003
Herbicides					
(4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	NA	NA
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA	NA
2-(4-Chloro-2-methylphenoxy)propanoic acid	NA	NA	NA	NA	NA
245T	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
245TP	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
Datapon	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
Dicamba	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
Dichloroprop	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
Dinoseb	< .01	< .01 /N	< .01 /N	< .01 /N	< .01 /N
MCPA	< .2	< .2 /N	< .2 /N	< .2 /N	< .2 /N
MCPP	< .2	< .2 /N	< .2 /N	< .2 /N	< .2 /N

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: Depth (feet): Sample Date:	SMBKGSE006	SMBKGSE007	SMBKGSE008	SMBKGSE009	SMBKGSE010
	0	0	0	0	0
	03/04/94	03/06/94	03/06/94	03/08/94	03/07/94
Analytes					
Metals					
Aluminum	7860	7760	2480	2720	3120
Antimony	< 5	< 5	< 5	< 5	< 5
Arsenic	5.9	4.8	6.01	4.2	3.5
Barium	< 39.8	< 39.8	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5	< .5
Calcium	60800	33900	97900	79000	58700
Chromium	10.8	12	4.25	6.3	5.87
Cobalt	6.08	5.36	3.42	2.59	4.74
Copper	22.3 j	14.1 j/J	7.55 j/J	10.5 j/J	12.5 j/J
Cyanide	< .25	< .25	< .25	< .25	< .25
Iron	14400	13100	6490	7780	8360
Lead	32.6	25.4	< 5	< 5	6.99
Magnesium	16300	13300	30700	21000	16200
Manganese	401 j	423 j	248 j	222 j	225 j
Mercury	< .1	< .1	< .1	< .1	< .1
Nickel	16.3 /I	15.5	8.14	10	12.1
Potassium	1780	1230	578	531	662

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name:	SMBKGSE006	SMBKGSE007	SMBKGSE008	SMBKGSE009	SMBKGSE010
Depth (feet):	0	0	0	0	0
Sample Date:	03/04/94	03/06/94	03/06/94	03/08/94	03/07/94
Analytes					
Metals					
Selenium	< .25 rr	< .25 j	< .25 j	< .25 j	< .25 j
Silver	< .5	< .5	< .5	< .5	< .5
Sodium	653	550	460	457	462
Thallium	< 10	< 10	< 10	< 10	< 10
Vanadium	19.3	24	8.73	13.6	11.2
Zinc	56.4 /I	56.4 j/I	23.6 j/I	33.3 j/I	53.7 j/I
Landfill Parameters					
Ammonia	43.3 /I	140 /I	17 bj/I	24.6 /I	19.1 b/I
Nitrite, Nitrate -- Non-Specific	< .2 j	.673	< .2 j	.289 b	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes

Volatile Organic Compounds	
1,1,1-Trichloroethane	< .01
1,1,2,2-Tetrachloroethane	< .01
1,1,2-Trichloroethane	< .01
1,1-Dichloroethane	< .01
1,1-Dichloroethene	< .01
1,2-Dichloroethane	
1,2-Dichloroethenes (cis & trans)	< .01
1,2-Dichloropropane	< .01
2-Chloroethylvinyl ether	< .01 rr
Acetic acid, vinyl ester	< .01
Acetone	
Benzene	< .01 j
Bromodichloromethane	< .01
Bromoform	< .01
Bromomethane	< .01
Carbon disulfide	
Carbon tetrachloride	< .01
Chlorobenzene	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes	
-----	
Volatile Organic Compounds	
Chloroethane	< .01 j
Chloroform	< .01
Chloromethane	< .01
Dibromochloromethane	< .01
Ethylbenzene	< .01
Methyl-N-butyl ketone	< .01 j
Methylene chloride	< .01
Methylene ketone/2-Butanone	< .01 j
Methylisobutyl ketone	< .01
Styrene	< .01
Tetrachloroethene	< .01
Toluene	< .01
Trichloroethene	< .01
Vinyl chloride	< .01
Xylenes, total combined	< .01
cis-1,3-Dichloropropene	< .01
trans-1,3-Dichloropropene	< .01
Semivolatile Organic Compounds	
1,2,4-Trichlorobenzene	< .14

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Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes

Semivolatile Organic Compounds

1,2-Dichlorobenzene < .14  
1,3-Dichlorobenzene < .14  
1,4-Dichlorobenzene < .14  
2,4,5-Trichlorophenol < .3  
2,4,6-Trichlorophenol < .3

2,4-Dichlorophenol < .14  
2,4-Dimethylphenol < .14  
2,4-Dinitrophenol < 1.4 j  
2,4-Dinitrotoluene < .14  
2,6,10,14-Tetramethylpentadecane .37 S

2,6-Dinitrotoluene < .14  
2-Chloronaphthalene < .14  
2-Chlorophenol < .14  
2-Methylnaphthalene NA  
2-Methylnaphthanene < .14

2-Methylphenol < .14  
2-Nitroaniline < .67  
2-Nitrophenol < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes

Semivolatile Organic Compounds

3,3'-Dichlorobenzidine	< .67 j
3-Methyl-4-chlorophenol	< .14
3-Nitroaniline	< .67
4,6-Dinitro-2-cresol	< 1.4
4-Bromophenylphenyl ether	< .14
4-Chloroaniline	< .3
4-Chlorophenylphenyl ether	< .14
4-Methylphenol	< .14
4-Nitroaniline	< .67 j
4-Nitrophenol	< 1.4
Acenaphthene	< .14
Acenaphthylene	< .14
Anthracene	< .14
Benzo[A]anthracene	.17 JP
Benzo[B]fluoranthene	< .14
Benzo[G,H,I]perylene	< .16
Benzo[K]fluoranthene	< .14
Benzo[a]pyrene	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes	
-----	
Semivolatile Organic Compounds	
Benzoic acid	< 1.4
Benzyl alcohol	< .14
Bis (2-Ethylhexyl) phthalate	.26 J
Butylbenzylphthalate	< .14
Carbazole	< .14 J
Chrysene	.19
Decane	.62 S
Di-N-butyl phthalate	< .14 J
Di-N-octyl phthalate	< .14
Dibenzo[A,H]anthracene	< .16
Dibenzofuran	< .14
Diethylphthalate	< .14
Dimethylphthalate	< .14
Dodecane	NA
Fluoranthene	< .14
Fluorene	< .14
Heptacosane	NA
Heptacosane	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes

Semivolatle Organic Compounds

Heptadecane	.37	S
Hexachlorobenzene	< .14	
Hexachlorobutadiene	< .14	
Hexachlorocyclopentadiene	< 1	
Hexachloroethane	< .14	

Hexadecane	.37	S
Hexadecanoic acid methyl ester	NA	
Indeno[1,2,3-C,D]pyrene	< .16	
Isophorone	< .14	
Myristic acid / Tetradecanoic acid	NA	

N-Nitrosodi-N-propylamine	< .14	
N-Nitrosodiphenylamine	< .14	
Naphthalene	< .14	
Nitrobenzene	< .14	
Nonacosane	NA	

Nonane	.5	S
Octadecane	NA	
Palmitic acid / Hexadecanoic acid	NA	

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes	
-----	
Semivolatile Organic Compounds	
Pentachlorophenol	< .67
Pentadecane	NA
Phenanthrene	< .14
Phenol	< .14
Pyrene	< .14
Tetradecane	.5 S
Tridecane	.5 S
Undecane	.62 S
bis (2-Chloroethoxy) methane	< .14
bis (2-Chloroethyl) ether	< .14
bis (2-Chloroisopropyl) ether	< .14 j
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clonaste	NA
Pesticides/PCBs	
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003
Aldrin	< .003
Dieldrin	< .003
Dimethoate	< .033 rr

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes

Pesticides/PCBs

Endosulfan sulfate

< .003

Endrin

< .003

Endrin aldehyde

< .022

Endrin ketone

< .003

Heptachlor

< .003

Heptachlor epoxide

< .003

Lindane

< .003

Methoxychlor

< .003

PCB 1016

< .013

PCB 1221

< .013

PCB 1232

< .013

PCB 1242

< .013

PCB 1248

< .013

PCB 1254

< .013

PCB 1260

< .013

Toxaphene

< .3

alpha-Benzenhexachloride

< .003

alpha-Chlordane

< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes	
-----	
Pesticides/PCBs	
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenhexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenhexachloride	< .003
gamma-Chlordane	< .003
Herbicides	
(4-Chloro-2-methylphenoxy)acetic acid	< .2
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01
2-(2,4-Dichlorophenoxy)propionic acid	< .01
2-(4-Chloro-2-methylphenoxy)propanoic acid	< .2 j
245T	< .01
245TP	< .01
Dalapon	< .01
Dicamba	< .01
Dichloroprop	NA
Dinoseb	< .01
MCPA	NA
MCPB	NA

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes	
-----	
Metals	
Aluminum	2610
Antimony	< 5
Arsenic	3.11
Barium	< 39.8
Beryllium	< .5
Cadmium	< .5
Calcium	69700
Chromium	6.47
Cobalt	< 2
Copper	2.98 j/j
Cyanide	< .25
Iron	5970
Lead	< 5
Magnesium	21100
Manganese	199 j
Mercury	< .1
Nickel	5.72
Potassium	373

-----

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5A.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE001 through SMBKGSE010

Sample Name: SMBKGSE010  
Depth (feet): 0  
Sample Date: 03/10/94

Analytes	
-----	
Metals	
Selenium	< .25 j
Silver	< .5
Sodium	423
Thallium	< 10
Vanadium	9.83
Zinc	14.9 j/1
Landfill Parameters	
Ammonia	27 j/1
Nitrite, Nitrate -- Non-Specific	< .2

-----  
Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE011	SMBKGSE012	SMBKGSE013	SMBKGSE014
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/02/94	03/03/94	03/10/94
Analytes				
-----				
Volatiles Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethane	< .01	< .01	< .01	< .01
1,1-Dichloroethene	< .01	< .01	< .01	< .01
1,2-Dichloroethane	< .01	< .01	< .01	< .01
1,2-Dichloroethenes (cis & trans)	< .01 j	< .01 j	< .01 j	< .01
1,2-Dichloropropane	< .01	< .01	< .01	< .01
2-Chloroethylvinyl ether	< .01 rr	< .01 rr	< .01 rr	< .01 rr
Acetic acid, vinyl ester	< .01	< .01	< .01	< .01
Acetone	< .01	< .01	< .01	< .01 j
Benzene	< .01	< .01	< .01	< .01
Bromodichloromethane	< .01	< .01	< .01	< .01
Bromoform	< .01	< .01	< .01	< .01
Bromomethane	< .01	< .01	< .01	< .01
Carbon disulfide	< .01 j	< .01 j	< .01 j	< .01
Carbon tetrachloride	< .01	< .01	< .01	< .01
Chlorobenzene	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE011 0 03/02/94	SMBKGSE012 0 03/02/94	SMBKGSE013 0 03/03/94	SMBKGSE014 0 03/10/94
Analytes				
-----				
Volatile Organic Compounds				
Chloroethane	< .01	< .01	< .01	< .01 j
Chloroform	< .01	< .01	< .01	< .01
Chloromethane	< .01 j	< .01 j	< .01 j	< .01
Dibromochloromethane	< .01	< .01	< .01	< .01
Ethylbenzene	< .01	< .01	< .01	< .01
Methyl-N-butyl ketone	< .01 j	< .01 j	< .01 j	< .01 j
Methylene chloride	< .01 j	< .01 j	< .01 j	< .01
Methylene ketone/2-Butanone	< .01 j	< .01 j	< .01 j	< .01 j
Methylethyl ketone/2-Butanone	NA	NA	NA	NA
Methylisobutyl ketone	< .01	< .01	< .01	< .01
Styrene	< .01	< .01	< .01	< .01
Tetrachloroethene	< .01	< .01	< .01	< .01
Toluene	< .01	< .01	< .01	< .01
Trichloroethene	< .01	< .01	< .01	< .01
Vinyl chloride	< .01	< .01	< .01	< .01
Xylenes, total combined	< .01	< .01	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE011 0 03/02/94	SMBKGSE012 0 03/02/94	SMBKGSE013 0 03/03/94	SMBKGSE014 0 03/10/94
Analytes				
Semivolatle Organic Compounds				
1,2,4-Trichlorobenzene	< .14 /M	< .14 /M	< .7 /M	< .14
1,2-Dichlorobenzene	< .14 /M	< .14 /M	< .7 /M	< .14
1,3-Dichlorobenzene	< .14 /M	< .14 /M	< .7 /M	< .14
1,4-Dichlorobenzene	< .14 /M	< .14 /M	< .7 /M	< .14
2,4,5-Trichlorophenol	< .3 /M	< .3 /M	< 2 /M	< .3
2,4,6-Trichlorophenol	< .3 /M	< .3 /M	< 2 /M	< .3
2,4-Dichlorophenol	< .14 /M	< .14 /M	< .7 /M	< .14
2,4-Dimethylphenol	< .14 /M	< .14 /M	< .7 /M	< .14
2,4-Dinitrophenol	< 1.4 /M	< 1.4 /M	< 7 /M	< 1.4 j
2,4-Dinitrotoluene	< .14 /M	< .14 /M	< .7 /M	< .14
2,6,10,14-Tetramethylpentadecane	NA	NA	NA	NA
2,6-Dinitrotoluene	< .14 /M	< .14 /M	< .7 /M	< .14
2-Chloronaphthalene	< .14 /M	< .14 /M	< .7 /M	< .14
2-Chlorophenol	< .14 /M	< .14 /M	< .7 /M	< .14
2-Methylnaphthalene	< .14 /M	< .14 /M	< .7 /M	NA
2-Methylnaphthanene	NA	NA	NA	< .14
2-Methylphenol	< .14 /M	< .14 /M	< .7 /M	< .14
2-Nitroaniline	< .67 /M	< .67 /M	< 3 /M	< .67

Note: Results are reported in micrograms per gram (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE011 0 03/02/94	SMBKGSE012 0 03/02/94	SMBKGSE013 0 03/03/94	SMBKGSE014 0 03/10/94
Analytes				
Semivolatile Organic Compounds				
2-Nitrophenol	< .14 /M	< .14 /M	< .7 /M	< .14
3,3'-Dichlorobenzidine	< .67 j/M	< .67 j/M	< 3 j/M	< .67 j
3-Methyl-4-chlorophenol	< .14 /M	< .14 /M	< .7 /M	< .14
3-Nitroaniline	< .67 j/M	< .67 j/M	< 3 j/M	< .67
4,6-Dinitro-2-cresol	< 1.4 /M	< 1.4 /M	< 7 /M	< 1.4
4-Bromophenylphenyl ether	< .14 /M	< .14 /M	< .7 /M	< .14
4-Chloroaniline	< .3 j/M	< .3 j/M	< 2 j/M	< .3
4-Chlorophenylphenyl ether	< .14 /M	< .14 /M	< .7 /M	< .14
4-Methylphenol	< .14 /M	< .14 /M	< .7 /M	< .14
4-Nitroaniline	< .67 j/M	< .67 j/M	< 3 j/M	< .67 j
4-Nitrophenol	< 1.4 /M	< 1.4 /M	< 7 /M	< 1.4
Acenaphthene	< .14 /M	< .14 /M	< .7 /M	< .14
Acenaphthylene	< .14 /M	< .14 /M	< .7 /M	< .14
Anthracene	< .14 /M	< .14 /M	< .7 /M	< .14
Benzo[A]anthracene	< .14 /M	< .14 /M	< .7 /M	< .14
Benzo[B]fluoranthene	< .14 /M	< .14 /M	< .7 /M	< .14
Benzo[G,H,I]perylene	< .16 /M	< .16 /M	< .8 /M	< .16
Benzo[K]fluoranthene	< .14 /M	< .14 /M	< .7 /M	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE011 0 03/02/94	SMBKGSE012 0 03/02/94	SMBKGSE013 0 03/03/94	SMBKGSE014 0 03/10/94
Analytes				
Semivolatile Organic Compounds				
Benzo[a]pyrene	< .14 /M	< .14 /M	< .7 /M	< .14
Benzoic acid	< 1.4 /M	< 1.4 /M	< 7 /M	< 1.4
Benzyl alcohol	< .14 /M	< .14 /M	< .7 /M	< .14
Bis (2-Ethylhexyl) phthalate	2.5 Bbj/M	.23 Bbj/M	< .7 J/M	.3 bj
Butylbenzylphthalate	< .14 /M	< .14 /M	< .7 /M	< .14
Carbazole	< .14 /M	< .14 /M	< .7 /M	< .14 j
Chrysene	< .14 /M	< .14 /M	< .7 /M	< .14
Di-N-butyl phthalate	< .14 J/M	< .14 J/M	< .7 J/M	< .14 j
Di-N-octyl phthalate	< .14 J/M	< .14 J/M	< .7 J/M	< .14
Dibenzo[a,h]anthracene	< .16 /M	< .16 /M	< .8 /M	< .16
Dibenzofuran	< .14 /M	< .14 /M	< .7 /M	< .14
Diethylphthalate	< .14 /M	< .14 /M	< .7 /M	< .14
Dimethylphthalate	< .14 /M	< .14 /M	< .7 /M	< .14
Fluoranthene	< .14 /M	< .14 /M	< .7 /M	< .14
Fluorene	< .14 /M	< .14 /M	< .7 /M	< .14
Heptadecane	NA	NA	NA	NA
Hexachlorobenzene	< .14 /M	< .14 /M	< .7 /M	< .14
Hexachlorobutadiene	< .14 /M	< .14 /M	< .7 /M	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE011	SMBKGSE012	SMBKGSE013	SMBKGSE014
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/02/94	03/03/94	03/10/94
Analytes				
Semivolatile Organic Compounds				
Hexachlorocyclopentadiene	< 1 j/M	< 1 j/M	< 5 j/M	< 1
Hexachloroethane	< .14 /M	< .14 /M	< .7 /M	< .14
Hexadecanoic acid methyl ester	NA	NA	NA	NA
Indeno[1,2,3-C,D]pyrene	< .16 /M	< .16 /M	< .8 /M	< .16
Isophorone	< .14 /M	< .14 /M	< .7 /M	< .14
N-Nitrosodi-N-propylamine	< .14 /M	< .14 /M	< .7 /M	< .14
N-Nitrosodiphenylamine	< .14 /M	< .14 /M	< .7 /M	< .14
Naphthalene	< .14 /M	< .14 /M	< .7 /M	< .14
Nitrobenzene	< .14 /M	< .14 /M	< .7 /M	< .14
Nonacosane	NA	1.4 S/M	NA	NA
Pentachlorophenol	< .67 /M	< .67 /M	< 3 /M	< .67
Phenanthrene	< .14 /M	< .14 /M	< .7 /M	< .14
Phenol	< .14 /M	< .14 /M	< .7 /M	< .14
Pyrene	< .14 /M	< .14 /M	< .7 /M	< .14
Tetradecane	NA	NA	NA	NA
Tricosane / n-Tricosane	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14 /M	< .14 /M	< .7 /M	< .14
bis (2-Chloroethyl) ether	< .14 /M	< .14 /M	< .7 /M	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE011	SMBKGSE012	SMBKGSE013	SMBKGSE014
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/02/94	03/03/94	03/10/94
Analytes	< .14 j/M	< .14 j/M	< .7 j/M	< .14 j
	NA	NA	NA	NA
Semivolatile Organic Compounds				
bis (2-Chloroisopropyl) ether				
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clinonaste				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.0474 C	< .003	.0265 C	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	.0771 C	< .003	.0782 C	< .003 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	.0368 C	< .003	.0411 C	< .003
Aldrin	< .003	< .003	< .003	.0107 Crr
Dieldrin	< .003	< .003	.00544 C	< .003
Dimethoate	< .033 j	< .033 j	< .033 j	< .033 rr
Endosulfan sulfate	< .003	< .003	< .003	< .003
Endrin	< .003	< .003	< .003	< .003
Endrin aldehyde	< .022	< .022	< .022	< .022
Endrin ketone	< .003	< .003	< .003	< .003
Heptachlor	< .003	< .003	< .003	< .003
Heptachlor epoxide	< .003	< .003	< .003	< .003
Lindane	< .003	< .003	< .003	< .003
Methoxychlor	< .003	< .003	< .003	< .003
PCB 1016	< .013	< .013	< .013	< .013
PCB 1221	< .013	< .013	< .013	< .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE011 0 03/02/94	SMBKGSE012 0 03/02/94	SMBKGSE013 0 03/03/94	SMBKGSE014 0 03/10/94
Analytes				
Pesticides/PCBs				
PCB 1232	< .013	< .013	< .013	< .013
PCB 1242	< .013	< .013	< .013	< .013
PCB 1248	< .013	< .013	< .013	< .013
PCB 1254	< .013	< .013	< .013	< .013
PCB 1260	< .013	< .013	< .013	< .013
Toxaphene	< .3	< .3	< .3	< .3
alpha-Benzenhexachloride	< .003	< .003	< .003	< .003
alpha-Chlordane	< .003	< .003	< .003	< .003
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003	< .003
beta-Benzenhexachloride	< .003	< .003	< .003	< .003
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003	< .003
delta-Benzenhexachloride	< .003	< .003	< .003	< .003
gamma-Chlordane	< .003	< .003	< .003	< .003
Herbicides				
(4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	< .2
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	< .01	< .01	< .01
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01	< .01	< .01
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	< .01
2-(4-Chloro-2-methylphenoxy)propanoic acid	NA	NA	NA	< .2 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE011	SMBKGSE012	SMBKGSE013	SMBKGSE014
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/02/94	03/03/94	03/10/94
<hr/>				
Analytes				
<hr/>				
Herbicides				
245T	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	.0182 cb	< .01	< .01
Dichloroprop	< .01	< .01	< .01	NA
<hr/>				
Dinoseb	< .01	< .01	< .01	< .01
MCPA	< .2	< .2 rr	< .2 rr	NA
MCP	< .2	< .2	< .2	NA
<hr/>				
Metals				
Aluminum	3440	14600	6370	2090
Antimony	< 5	< 5	< 5	< 5
Arsenic	1.4	9.1	5.3	2.96
Barium	< 39.8	86.6	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5
<hr/>				
Cadmium	< .5	< .5	< .5	< .5
Calcium	90200	35000	57000	80000
Chromium	5.93	19.8	9.95	3.82
Cobalt	3.68	7.75	4.24	< 2
Copper	13 j	16.7 j	46.4 j	3.33 j/j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE011	SMBKGSE012	SMBKGSE013	SMBKGSE014
Depth (feet):	0	0	0	0
Sample Date:	03/02/94	03/02/94	03/03/94	03/10/94

Analytes

Metals

Cyanide	< .25	< .25	< .25	< .25
Iron	13000	19800	11300	5540
Lead	7	8.97	9.95	< 5
Magnesium	22500	19800	13300	29600
Manganese	415 j	821 j	557 j	222 j
Mercury	< .1	< .1	< .1	< .1
Nickel	17.8 /I	19.8 /I	10.3 /I	6.77
Potassium	581	2280	1100	296
Selenium	< .25 rr	< .25 rr	< .25 rr	< .25 j
Silver	< .5	< .5	< .5	< .5
Sodium	451	547	557	431
Thallium	< 10	18.2	< 10	< 10
Vanadium	14.2	35	18.6	7.51
Zinc	42.7 /I	54.7 /I	76.9 /I	13.5 j/I

Landfill Parameters

Ammonia	33.1 /I	83.6 /I	73.3 /I	19.5 b/I
Nitrite, Nitrate -- Non-Specific	< .2	.462 b	< .2 j	< .2

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	< .01	< .01	< .01	< .01 D
1,1,2,2-Tetrachloroethane	< .01	< .01	< .01	< .01 D
1,1,2-Trichloroethane	< .01	< .01	< .01	< .01 D
1,1-Dichloroethane	< .01	< .01	< .01	< .01 D
1,1-Dichloroethene	< .01	< .01	< .01	< .01 D
1,2-Dichloroethane	< .01	< .01	< .01	< .01 D
1,2-Dichloroethenes (cis & trans)	< .01	< .01	< .01	< .01 D
1,2-Dichloropropane	< .01	< .01	< .01	< .01 D
2-Chloroethylvinyl ether	< .01 rr	< .01 rr	< .01 rr	< .01 Drr
Acetic acid, vinyl ester	< .01	< .01 j	< .01 j	< .01 Dj
Acetone	< .01 j	< .01	< .01	< .01 D
Benzene	< .01	< .01	< .01	< .01 D
Bromodichloromethane	< .01	< .01	< .01	< .01 D
Bromoform	< .01	< .01	< .01	< .01 D
Bromomethane	< .01	< .01	< .01	< .01 D
Carbon disulfide	< .01	< .01	< .01	< .01 D
Carbon tetrachloride	< .01	< .01	< .01	< .01 D
Chlorobenzene	< .01	< .01	< .01	< .01 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
Volatile Organic Compounds				
Chloroethane	< .01 j	< .01	< .01	< .01 D
Chloroform	< .01	< .01	< .01	< .01 D
Chloromethane	< .01	< .01	< .01	< .01 D
Dibromochloromethane	< .01	< .01	< .01	< .01 D
Ethylbenzene	< .01	< .01	< .01	< .01 D
Methyl-N-butyl ketone	< .01 j	< .01	< .01	< .01 D
Methylene chloride	< .01	< .01	< .01	< .01 D
Methylene ketone/2-Butanone	< .01 j	NA	NA	NA
Methylethyl ketone/2-Butanone	NA	< .01 j	< .01 j	< .01 D j
Methylisobutyl ketone	< .01	< .01	< .01	< .01 D
Styrene	< .01	< .01	< .01	< .01 D
Tetrachloroethene	< .01	< .01	< .01	< .01 D
Toluene	< .01	< .01	< .01	< .01 D
Trichloroethene	< .01	< .01	< .01	< .01 D
Vinyl chloride	< .01	< .01	< .01	< .01 D
Xylenes, total combined	< .01	< .01	< .01	< .01 D
cis-1,3-Dichloropropene	< .01	< .01	< .01	< .01 D
trans-1,3-Dichloropropene	< .01	< .01	< .01	< .01 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
Semivolatiles Organic Compounds				
1,2,4-Trichlorobenzene	< .14	< .14	< .14	< .14 D
1,2-Dichlorobenzene	< .14	< .14	< .14	< .14 D
1,3-Dichlorobenzene	< .14	< .14	< .14	< .14 D
1,4-Dichlorobenzene	< .14	< .14	< .14	< .14 D
2,4,5-Trichlorophenol	< .3	< .3	< .3	< .3 D
2,4,6-Trichlorophenol	< .3	< .3	< .3	< .3 D
2,4-Dichlorophenol	< .14	< .14	< .14	< .14 D
2,4-Dimethylphenol	< .14	< .14	< .14	< .14 D
2,4-Dinitrophenol	< 1.4 j	< 1.4	< 1.4	< 1.4 D
2,4-Dinitrotoluene	< .14	< .14	< .14	< .14 D
2,6,10,14-Tetramethylpentadecane	NA	.38 S	.48 S	.59 S
2,6-Dinitrotoluene	< .14	< .14	< .14	< .14 D
2-Chloronaphthalene	< .14	< .14	< .14	< .14 D
2-Chlorophenol	< .14	< .14	< .14	< .14 D
2-Methylnaphthalene	NA	< .14	< .14	< .14 D
2-Methylnaphthanene	< .14	NA	NA	NA
2-Methylphenol	< .14	< .14	< .14	< .14 D
2-Nitroaniline	< .67	< .67	< .67	< .67 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
Semivolatiles Organic Compounds				
2-Nitrophenol	< .14	< .14	< .14	< .14 D
3,3'-Dichlorobenzidine	< .67 j	< .67 j	< .67 j	< .67 D j
3-Methyl-4-chlorophenol	< .14	< .14	< .14	< .14 D
3-Nitroaniline	< .67	< .67 j	< .67 j	< .67 D j
4,6-Dinitro-2-cresol	< 1.4	< 1.4	< 1.4	< 1.4 D
4-Bromophenylphenyl ether	< .14	< .14	< .14	< .14 D
4-Chloroaniline	< .3	< .3 j	< .3 j	< .3 D j
4-Chlorophenylphenyl ether	< .14	< .14	< .14	< .14 D
4-Methylphenol	< .14	< .14	< .14	< .14 D
4-Nitroaniline	< .67 j	< .67	< .67	< .67 D
4-Nitrophenol	< 1.4	< 1.4	< 1.4	< 1.4 D
Acenaphthene	< .14	< .14	< .14	< .14 D
Acenaphthylene	< .14	< .14	< .14	< .14 D
Anthracene	< .14	< .14	< .14	< .14 D
Benzo[A]anthracene	< .14	< .14	< .14	< .14 D
Benzo[B]fluoranthene	< .14	< .14	< .14	< .14 D
Benzo[G,H,I]perylene	< .16	< .16 j	< .16 j	< .16 D j
Benzo[K]fluoranthene	< .14	< .14	< .14	< .14 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE015	SMBKGSE016	SMBKGSE017	SMBKGSE017-DUP
Depth (feet):	0	0	0	0
Sample Date:	03/11/94	02/24/94	02/24/94	02/24/94
Analytes				
-----				
Semivolatile Organic Compounds				
Benzo[a]pyrene	< .14	< .14	< .14	< .14 D
Benzoic acid	< 1.4	< 1.4	< 1.4	< 1.4 D
Benzyl alcohol	< .14	< .14	< .14	< .14 D
Bis (2-Ethylhexyl) phthalate	< .14 j	< .14	< .14	.17 DJPb
Butylbenzylphthalate	< .14	< .14	< .14	< .14 D
Carbazole	< .14 j	< .14 j	< .14 j	< .14 DJ
Chrysene	< .14	< .14	< .14	< .14 D
Di-N-butyl phthalate	< .14 j	< .14 j	< .14 j	< .14 DJ
Di-N-octyl phthalate	< .14	< .14 j	< .14 j	< .14 DJ
Dibenzo[a,h]anthracene	< .16	< .16 j	< .16 j	< .16 DJ
Dibenzofuran	< .14	< .14	< .14	< .14 D
Diethylphthalate	< .14	< .14	< .14	< .14 D
Dimethylphthalate	< .14	< .14	< .14	< .14 D
Fluoranthene	< .14	< .14	< .14	< .14 D
Fluorene	< .14	< .14	< .14	< .14 D
Heptadecane	NA	NA	NA	.36 S
Hexachlorobenzene	< .14	< .14	< .14	< .14 D
Hexachlorobutadiene	< .14	< .14	< .14	< .14 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
Semivolatile Organic Compounds				
Hexachlorocyclopentadiene	< 1	< 1	< 1	< 1 D
Hexachloroethane	< .14	< .14	< .14	< .14 D
Hexadecanoic acid methyl ester	NA	NA	NA	NA
Indeno[1,2,3-C,D]pyrene	< .16	< .16 j	< .16 j	< .16 Dj
Isophorone	< .14	< .14	< .14	< .14 D
N-Nitrosodi-N-propylamine	< .14	< .14	< .14	< .14 D
N-Nitrosodiphenylamine	< .14	< .14	< .14	< .14 D
Naphthalene	< .14	< .14	< .14	< .14 D
Nitrobenzene	< .14	< .14	< .14	< .14 D
Nonacosane	NA	NA	NA	NA
Pentachlorophenol	< .67	< .67	< .67	< .67 D
Phenanthrene	< .14	< .14	< .14	< .14 D
Phenol	< .14	< .14	< .14	< .14 D
Pyrene	< .14	< .14	< .14	< .14 D
Tetradecane	NA	NA	NA	.36 S
Tricosane / n-Tricosane	NA	NA	NA	NA
bis (2-Chloroethoxy) methane	< .14	< .14	< .14	< .14 D
bis (2-Chloroethyl) ether	< .14	< .14	< .14	< .14 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes	< .14 j NA	< .14 NA	< .14 NA	< .14 D NA
Semivolatile Organic Compounds				
bis (2-Chloroisopropyl) ether				
r-Sitosterol / (3 $\beta$ ,24s)-Stigmast-5-en-3-ol/Clonaste				
Pesticides/PCBs				
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .003	.00419 C	< .003 j	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003 j	.028 C	< .003 j	< .003 D
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003	.0047 C	< .003 j	< .003 D
Aldrin	< .003	< .003	< .003 j	< .003 D
Dieldrin	< .003	< .003	< .003 j	< .003 D
Dimethoate	< .033 rr	< .033 rr/I	< .033 rr/I	< .033 Drr/I
Endosulfan sulfate	< .003	< .003	< .003 j	< .003 D
Endrin	< .003	< .003	< .003 j	< .003 D
Endrin aldehyde	< .022	< .022	< .022 j	< .022 D
Endrin ketone	< .003	< .003	< .003 j	< .003 D
Heptachlor	< .003	< .003	< .003 j	< .003 D
Heptachlor epoxide	< .003	< .003	< .003 j	< .003 D
Lindane	< .003	< .003	< .003 j	< .003 D
Methoxychlor	< .003	< .003	< .003 j	< .003 D
PCB 1016	< .013	< .013	< .013 j	< .013 D
PCB 1221	< .013	< .013	< .013 j	< .013 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
Pesticides/PCBs				
PCB 1232	< .013	< .013	< .013 J	< .013 D
PCB 1242	< .013	< .013	< .013 J	< .013 D
PCB 1248	< .013	< .013	< .013 J	< .013 D
PCB 1254	< .013	< .013	< .013 J	< .013 D
PCB 1260	< .013	< .013	< .013 J	< .013 D
Toxaphene	< .3	< .3	< .3 J	< .3 D
alpha-Benzenehexachloride	< .003	< .003	< .003 J	< .003 D
alpha-Chlordane	< .003	< .003	< .003 J	< .003 D
alpha-Endosulfan/Endosulfan I	< .003	< .003	< .003 J	< .003 D
beta-Benzenehexachloride	< .003	< .003	< .003 J	< .003 D
beta-Endosulfan/Endosulfan II	< .003	< .003	< .003 J	< .003 D
delta-Benzenehexachloride	< .003	< .003	< .003 J	< .003 D
gamma-Chlordane	< .003	< .003	< .003 J	< .003 D
Herbicides				
(4-Chloro-2-methylphenoxy)acetic acid	< .2	< .2 rr	< .2 rr	< .2 Drr
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .01	.0241 Crr	.0228 Crr	< .01 Drr
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .01	< .01 rr	< .01 rr	< .01 Drr
2-(2,4-Dichlorophenoxy)propionic acid	< .01	< .01 rr	< .01 rr	< .01 Drr
2-(4-Chloro-2-methylphenoxy)propanoic acid	< .2 J	< .2 rr	< .2 rr	< .2 Drr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: Depth (feet): Sample Date:	SMBKGSE015 0 03/11/94	SMBKGSE016 0 02/24/94	SMBKGSE017 0 02/24/94	SMBKGSE017-DUP 0 02/24/94
Analytes				
Herbicides				
245T	< .01	< .01	< .01	< .01
245TP	< .01	< .01	< .01	< .01
Dalapon	< .01	< .01	< .01	< .01
Dicamba	< .01	< .01	< .01	< .01
Dichloroprop	NA	NA	NA	NA
Dinoseb	< .01	< .01	< .01	< .01
MCPA	NA	NA	NA	NA
MCPP	NA	NA	NA	NA
Metals				
Aluminum	1910	3810	5640	2130
Antimony	< 5	< 5	< 5	< 5
Arsenic	2.32	15	2.4	4.7
Barium	< 39.8	< 39.8	< 39.8	< 39.8
Beryllium	< .5	< .5	< .5	< .5
Cadmium	< .5	< .5	< .5	< .5
Calcium	64100	61000	79100	92300
Chromium	4.37	6.1	7.91	4.38
Cobalt	< 2	2.67	3.24	< 2
Copper	2.32	6.86	12	10.8

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name:	SMBKGSE015	SMBKGSE016	SMBKGSE017	SMBKGSE017-DUP
Depth (feet):	0	0	0	0
Sample Date:	03/11/94	02/24/94	02/24/94	02/24/94
-----				
Analytes				
-----				
Metals				
Cyanide	< .25	< .25	< .25	< .25 D
Iron	4640	7370	9350	5440 D
Lead	< 5	< 5	< 5	< 5 D
Magnesium	12800	14000	19200	27200 D
Manganese	177 J	241 J	300 J	225 Dj
Mercury	< .1	< .1	< .1	< .1 D
Nickel	4.37	7.12 /1	8.15 /1	3.67 D/1
Potassium	232	788	1320	367 D
Selenium	< .25 j	< .25 rr	< .25 rr	< .25 Drr
Silver	< .5	< .5	< .5	< .5 D
Sodium	423	419	564	473 D
Thallium	< 10	< 10	< 10	NA
Vanadium	7.09	12.7	15.6	8.28 D
Zinc	20.5 j/1	36.8 /1	30 /1	21.3 D/1
Landfill Parameters				
Ammonia	36.3 /1	17.5 b/1	29.4 /1	18.9 Dbj/1
Nitrite, Nitrate -- Non-Specific	.509	.525	< .2	< .2 D

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

-----  
Volatile Organic Compounds

1,1,1-Trichloroethane < .01 < .01  
1,1,2,2-Tetrachloroethane < .01 < .01  
1,1,2-Trichloroethane < .01 < .01  
1,1-Dichloroethane < .01 < .01  
1,1-Dichloroethene < .01 < .01

1,2-Dichloroethane < .01 < .01  
1,2-Dichloroethenes (cis & trans) < .01 < .01  
1,2-Dichloropropane < .01 < .01  
2-Chloroethylvinyl ether < .01 rr < .01 rr  
Acetic acid, vinyl ester < .01 j < .01 j

Acetone < .01 < .01  
Benzene < .01 < .01  
Bromodichloromethane < .01 < .01  
Bromoform < .01 < .01  
Bromomethane < .01 < .01

Carbon disulfide < .01 < .01  
Carbon tetrachloride < .01 < .01  
Chlorobenzene < .01 < .01

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Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

-----  
Volatile Organic Compounds

Chloroethane	< .01	< .01
Chloroform	< .01	< .01
Chloromethane	< .01	< .01
Dibromochloromethane	< .01	< .01
Ethylbenzene	< .01	< .01

Methyl-N-butyl ketone	< .01	< .01
Methylene chloride	< .01	< .01
Methylene ketone/2-Butanone	NA	NA
Methylethyl ketone/2-Butanone	< .01 j	< .01 j
Methylisobutyl ketone	< .01	< .01

Styrene	< .01	< .01
Tetrachloroethene	< .01	< .01
Toluene	< .01	< .01
Trichloroethene	< .01	< .01
Vinyl chloride	< .01	< .01

Xylenes, total combined	< .01	< .01
cis-1,3-Dichloropropene	< .01	< .01
trans-1,3-Dichloropropene	< .01	< .01

-----  
Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene < .14 < .14  
1,2-Dichlorobenzene < .14 < .14  
1,3-Dichlorobenzene < .14 < .14  
1,4-Dichlorobenzene < .14 < .14  
2,4,5-Trichlorophenol < .3 < .3

2,4,6-Trichlorophenol < .3 < .3  
2,4-Dichlorophenol < .14 < .14  
2,4-Dimethylphenol < .14 < .14  
2,4-Dinitrophenol < 1.4 < 1.4  
2,4-Dinitrotoluene < .14 < .14

2,6,10,14-Tetramethylpentadecane .61 S NA  
2,6-Dinitrotoluene < .14 < .14  
2-Chloronaphthalene < .14 < .14  
2-Chlorophenol < .14 < .14  
2-Methylnaphthalene < .14 < .14

2-Methylnaphthanene NA NA  
2-Methylphenol < .14 < .14  
2-Nitroaniline < .67 < .67

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D58.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Semivolatiles Organic Compounds

2-Nitrophenol	< .14	< .14
3,3'-Dichlorobenzidine	< .67 j	< .67 j
3-Methyl-4-chlorophenol	< .14	< .14
3-Nitroaniline	< .67 j	< .67 j
4,6-Dinitro-2-cresol	< 1.4	< 1.4
4-Bromophenylphenyl ether	< .14	< .14
4-Chloroaniline	< .3 j	< .3 j
4-Chlorophenylphenyl ether	< .14	< .14
4-Methylphenol	< .14	< .14
4-Nitroaniline	< .67	< .67
4-Nitrophenol	< 1.4	< 1.4
Acenaphthene	< .14	< .14
Acenaphthylene	< .14	< .14
Anthracene	< .14	< .14
Benzo[A]anthracene	.26	< .14
Benzo[B]fluoranthene	.2	< .14
Benzo[G,H,I]perylene	< .16 j	< .16 j
Benzo[K]fluoranthene	< .14	< .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Semivolatile Organic Compounds

Benzo[a]pyrene .18 < .14  
Benzoic acid < 1.4 < 1.4  
Benzyl alcohol < .14 < .14  
Bis (2-Ethylhexyl) phthalate .28 b < .14  
Butylbenzylphthalate < .14 < .14

Carbazole < .14 j < .14 j  
Chrysene .33 < .14  
Di-N-butyl phthalate < .14 j < .14 j  
Di-N-octyl phthalate < .14 j < .14 j  
Dibenzo[A,H]anthracene < .16 j < .16 j

Dibenzofuran < .14 < .14  
Diethylphthalate < .14 < .14  
Dimethylphthalate < .14 < .14  
Fluoranthene .55 < .14  
Fluorene < .14 < .14

Heptadecane NA NA  
Hexachlorobenzene < .14 < .14  
Hexachlorobutadiene < .14 < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Semivolatiles Organic Compounds

Hexachlorocyclopentadiene < 1  
Hexachloroethane < .14  
Hexadecanoic acid methyl ester NA  
Indeno[1,2,3-c,d]pyrene < .16 j  
Isophorone < .14

N-Nitrosodi-N-propylamine < .14  
N-Nitrosodiphenylamine < .14  
Naphthalene < .14  
Nitrobenzene < .14  
Nonacosane 3.7 S

Pentachlorophenol < .67  
Phenanthrene .45  
Phenol < .14  
Pyrene .5  
Tetradecane .37 S

Tricosane / n-Tricosane .37 S  
bis (2-Chloroethoxy) methane < .14  
bis (2-Chloroethyl) ether < .14

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Semivolatile Organic Compounds

bis (2-Chloroisopropyl) ether < .14 < .14 S  
r-Sitosterol / (3B,24s)-Stigmast-5-en-3-ol/Clonaste 3.7 5.2 S

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane .0381 C < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane .18 C < .003  
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene .059 C < .003  
Aldrin < .003 < .003  
Dieldrin < .003 < .003

Dimethoate < .033 rr/l < .033 rr/l  
Endosulfan sulfate < .003 < .003  
Endrin < .003 < .003  
Endrin aldehyde < .022 < .022  
Endrin ketone < .003 < .003

Heptachlor < .003 < .003  
Heptachlor epoxide < .003 < .003  
Lindane < .003 < .003  
Methoxychlor < .003 < .003  
PCB 1016 < .013 < .013

PCB 1221 < .013 < .013

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Pesticides/PCBs

PCB 1232 < .013 < .013  
PCB 1242 < .013 < .013  
PCB 1248 < .013 < .013  
PCB 1254 < .013 < .013  
PCB 1260 < .013 < .013

Toxaphene

alpha-Benzehexachloride < .3 < .3  
alpha-Chlordane < .003 < .003  
alpha-Endosulfan/Endosulfan I < .003 < .003  
beta-Benzehexachloride < .003 < .003

beta-Endosulfan/Endosulfan II

delta-Benzehexachloride < .003 < .003  
gamma-Chlordane < .003 < .003

Herbicides

(4-Chloro-2-methylphenoxy)acetic acid < .2 rr < .2 rr  
2,4-D / 2,4-Dichlorophenoxyacetic acid .0283 Crr .034 Crr  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01 rr < .01 rr  
2-(2,4-Dichlorophenoxy)propionic acid < .01 rr < .01 rr  
2-(4-Chloro-2-methylphenoxy)propanoic acid < .2 rr < .2 rr

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Herbicides

245T < .01 rr < .01 rr  
245TP < .01 rr < .01 rr  
Dalapon < .01 rr < .01 rr  
Dicamba < .01 rr < .01 rr  
Dichloroprop NA NA

Dinoseb

MCPA < .01 rr .0183 Crr  
MCPB NA NA  
MCPD NA NA

Metals

Aluminum 3810 6010  
Antimony < 5 < 5  
Arsenic 4.9 5.2  
Barium < 39.8 < 39.8  
Beryllium < .5 < .5  
Cadmium < .5 < .5  
Calcium 43000 65400  
Chromium 5.9 8.24  
Cobalt 2.83 4.58  
Copper 10.6 j 11.1 j

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D5B.  
Summary of Base-Wide Sediment Samples Analytical Results  
Sites SMBKGSE011 through SMBKGSE019

Sample Name: SMBKGSE018 SMBKGSE019  
Depth (feet): 0 0  
Sample Date: 02/24/94 02/24/94

Analytes

Metals

Cyanide	< .25	< .25
Iron	7740	12700
Lead	6.76	8.37
Magnesium	12300	23500
Manganese	209 j	627 j
Mercury	< .1	< .1
Nickel	7.13 /1	11.4 /1
Potassium	725	876
Selenium	< .25 rr	< .25 rr
Silver	< .5	< .5
Sodium	479	523
Thallium	< 10	< 10
Vanadium	12.3	18.3
Zinc	44.2 /1	56.2 /1

Landfill Parameters

Ammonia  
Nitrite, Nitrate -- Non-Specific

59.2 /1  
< .2  
79.9 /1  
.344 b

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1001MW001	E1001SB001	E1001SB005	E1002MW003	E1002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
-----					
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	NA
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	NA
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	NA
1,1-Dichloroethane	< 2	< 2	< 2	< 2	NA
1,1-Dichloroethene	< 2	< 2	< 2	< 2	NA
-----					
1,2-Dichloroethane	< 2	< 2	< 2	< 2	NA
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	NA
1,2-Dichloropropane	< 2	< 2	< 2	< 2	NA
2-Butanone	< 10	< 10	< 10	< 10	NA
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	NA
-----					
2-Hexanone	< 10	< 10	< 10	< 10	NA
Acetone	< 10	21	< 10	< 10	NA
Benzene	< 2	< 2	< 2	< 2	NA
Bromodichloromethane	< 2	< 2	< 2	< 2	NA
Bromoform	< 2	< 2	< 2	< 2	NA
-----					
Bromomethane	< 2	< 2	< 2	< 2	NA
Carbon disulfide	< 10	< 10	< 10	< 10	NA
Carbon tetrachloride	< 2	< 2	< 2	< 2	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI001MW001	EI001SB001	EI001SB005	EI002MW003	EI002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
<hr/>					
Analytes					
<hr/>					
Volatile Organic Compounds					
Chlorobenzene	< 2	< 2	< 2	< 2	NA
Chloroethane	< 10	< 10	< 10	< 10	NA
Chloroform	2.9	5	3.6	3.1	NA
Chloromethane	< 2	< 2	< 2	< 2	NA
Dibromochloromethane	< 2	< 2	< 2	< 2	NA
Ethylbenzene	< 2	< 2	< 2	< 2	NA
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	NA
Methylene chloride	< 10	< 10	< 10	< 10	NA
Styrene	< 2	< 2	< 2	< 2	NA
Tetrachloroethene	< 2	< 2	< 2	< 2	NA
Toluene	< 2	< 2	< 2	< 2	NA
Trichloroethene	< 2	< 2	< 2	< 2	NA
Vinyl acetate	< 10	< 10	< 10	< 10	NA
Vinyl chloride	< 2	< 2	< 2	< 2	NA
Xylenes, total combined	< 10	< 10	< 10	< 10	NA
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	NA
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	NA
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1



Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: Depth (feet): Sample Date:	EI001MW001 -9999 2/2/94	EI001SB001 -9999 12/16/93	EI001SB005 -9999 12/19/93	EI002MW003 -9999 2/7/94	EI002SB001 -9999 12/16/93
Analytes					
Semivolatiles Organic Compounds					
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenylacetic acid / DCAA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA
2-Methylphenol / o-Cresol	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI001MW001	EI001SB001	EI001SB005	EI002MW003	EI002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
Analytes					
Semivolatiles Organic Compounds					
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA
4-Bromophenylphenyl ether	NA	NA	NA	NA	NA
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA
4-Chlorophenylphenyl ether	NA	NA	NA	NA	NA
4-Methylphenol / p-Cresol	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA
Benzo[a]anthracene	NA	NA	NA	NA	NA
Benzo[a]pyrene	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	NA	NA	NA	NA	NA
Benzo[def]phenanthrene	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI001MW001	EI001SB001	EI001SB005	EI002MW003	EI002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
<hr/>					
Analytes					
<hr/>					
Semivolatile Organic Compounds					
Benzoic acid	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
Butylbenzyl phthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA
<hr/>					
Di-N-butyl phthalate	NA	NA	NA	NA	NA
Di-N-octyl phthalate	NA	NA	NA	NA	NA
Dibenz[ah]anthracene	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA
<hr/>					
Dimethyl phthalate	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA
Hexachloro-1,3-butadiene	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA
<hr/>					
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: Depth (feet): Sample Date:	EI001MW001 -9999 2/2/94	EI001SB001 -9999 12/16/93	EI001SB005 -9999 12/19/93	EI002MW003 -9999 2/7/94	EI002SB001 -9999 12/16/93
Analytes					
Semivolatiles Organic Compounds					
Isophorone	NA	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA
Pentacosane	2.04	31.4 /?	6.52 /?	1.67	NA
Phenanthrene	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA
Phosphoric acid triphenyl ester	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA
Pesticides/PCBs					
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1001MW001	E1001SB001	E1001SB005	E1002MW003	E1002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
Analytes					
Pesticides/PCBs					
Dieldrin	NA	NA	NA	NA	NA
Dimethoate	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA
Endrin aldehyde	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA
PCB 1016	NA	NA	NA	NA	NA
PCB 1221	NA	NA	NA	NA	NA
PCB 1232	NA	NA	NA	NA	NA
PCB 1242	NA	NA	NA	NA	NA
PCB 1248	NA	NA	NA	NA	NA
PCB 1254	NA	NA	NA	NA	NA
PCB 1260	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: Depth (feet): Sample Date:	EI001MW001 -9999 2/2/94	EI001SB001 -9999 12/16/93	EI001SB005 -9999 12/19/93	EI002MW003 -9999 2/7/94	EI002SB001 -9999 12/16/93
Analytes					
Pesticides/PCBs					
alpha-Benzenehexachloride	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA
alpha-Endosulfan	NA	NA	NA	NA	NA
beta-Benzenehexachloride	NA	NA	NA	NA	NA
beta-Endosulfan	NA	NA	NA	NA	NA
delta-Benzenehexachloride	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	NA	NA	NA	NA
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	NA	NA	NA	NA
2,4-Dichlorophenoxyacetic acid / 2,4-D	NA	NA	NA	NA	NA
2,4-Dinitro-6-sec-butylphenol / Dinoseb	NA	NA	NA	NA	NA
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA	NA
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	NA	NA	NA	NA	NA
245TP / Silvex	NA	NA	NA	NA	NA
Dalapon / alpha, alpha-Dichloropropionic acid	NA	NA	NA	NA	NA
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	NA	NA
Mecoprop	NA	NA	NA	NA	NA
Metals					
Aluminum	NA	40.9	< 40	NA	NA

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1001MW001	E1001SB001	E1001SB005	E1002MW003	E1002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
-----					
Analytes					
-----					
Metals					
Aluminum (Filtered)	NA	NA	NA	NA	NA
Antimony	NA	< 3.05	< 3.05	NA	NA
Antimony (Filtered)	NA	NA	NA	NA	NA
Arsenic	NA	< 2.5	< 2.5	NA	NA
Arsenic (Filtered)	NA	NA	NA	NA	NA
Barium	NA	< 25	< 25	NA	NA
Barium (Filtered)	NA	NA	NA	NA	NA
Beryllium	NA	< 5	< 5	NA	NA
Beryllium (Filtered)	NA	NA	NA	NA	NA
Boron	NA	NA	NA	NA	NA
Cadmium	NA	< 5	< 5	NA	NA
Cadmium (Filtered)	NA	NA	NA	NA	NA
Calcium	NA	1060	128	NA	NA
Calcium (Filtered)	NA	NA	NA	NA	NA
Chromium	NA	< 10	< 10	NA	NA
Chromium (Filtered)	NA	NA	NA	NA	NA
Cobalt	NA	< 20	< 20	NA	NA
Cobalt (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1001MW001	E1001SB001	E1001SB005	E1002MW003	E1002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
Analytes					
Metals					
Copper	NA	< 5	< 5	NA	NA
Copper (Filtered)	NA	NA	NA	NA	NA
Cyanide	NA	< 2.5	< 2.5	NA	NA
Iron	NA	72.5	< 45	NA	NA
Iron (Filtered)	NA	NA	NA	NA	NA
Lead	NA	< 2	2.4	NA	NA
Lead (Filtered)	NA	NA	NA	NA	NA
Magnesium	NA	334 /I	< 50 /I	NA	NA
Magnesium (Filtered)	NA	NA	NA	NA	NA
Manganese	NA	< 5	< 5	NA	NA
Manganese (Filtered)	NA	NA	NA	NA	NA
Mercury	NA	< .2	< .2	NA	NA
Nickel	NA	< 15	< 15	NA	NA
Nickel (Filtered)	NA	NA	NA	NA	NA
Potassium	NA	< 550	< 550	NA	NA
Potassium (Filtered)	NA	NA	NA	NA	NA
Selenium	NA	< 2.5	< 2.5	NA	< 2.5
Selenium (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: Depth (feet): Sample Date:	EI001MW001 -9999 2/2/94	EI001S8001 -9999 12/16/93	EI001S8005 -9999 12/19/93	EI002MW003 -9999 2/7/94	EI002S8001 -9999 12/16/93
Analytes					
Metals					
Silver	NA	< 5	< 5	NA	NA
Silver (Filtered)	NA	NA	NA	NA	NA
Sodium	NA	160 /1	108 /1	NA	NA
Sodium (Filtered)	NA	NA	NA	NA	NA
Thallium	NA	< 2.5	< 2.5	NA	NA
Thallium (Filtered)	NA	NA	NA	NA	NA
Vanadium	NA	< 10	< 10	NA	NA
Vanadium (Filtered)	NA	NA	NA	NA	NA
Zinc	NA	< 20	< 20	NA	NA
Zinc (Filtered)	NA	NA	NA	NA	NA
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	NA
Ammonia	NA	NA	NA	NA	NA
Biological oxygen demand	NA	NA	NA	NA	NA
Chemical oxygen demand	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA
Diesel fuel	< .4	< .4 /?	< .4 /?	< .4	NA
Fluoride	NA	NA	NA	NA	NA
Gasoline / Gasoline, regular	< .4	< .4 /?	< .4 /?	< .4	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI001MW001	EI001SB001	EI001SB005	EI002MW003	EI002SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	2/2/94	12/16/93	12/19/93	2/7/94	12/16/93
Analytes					
Landfill Parameters					
Nitrite, nitrate-non specific	NA	NA	NA	NA	NA
Sulfate	NA	NA	NA	NA	NA
Total dissolved solids	NA	NA	NA	NA	NA
Total organic carbon	NA	NA	NA	NA	NA
Total recoverable phenolics	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: Depth (feet): Sample Date:	E1002SB001 -9999 12/6/93	E1002SB006 -9999 12/15/93	E1002SB06A -9999 1/23/94	E1003MH004 -9999 2/16/94	E1003SB001 -9999 11/30/93
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	51
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	50 D
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2 R	< 2	< 2	< 2	< 2 R
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: E1002SB001 E1002SB006 E1002SB06A E1003MW004 E1003SB001  
Depth (feet): -9999 -9999 -9999 -9999 -9999  
Sample Date: 12/6/93 12/15/93 1/23/94 2/16/94 11/30/93

Analytes

-----  
Volatile Organic Compounds

Chlorobenzene	< 2	< 2	< 2	< 2	52 D
Chloroethane	< 10	< 10	< 10	< 10	< 10
Chloroform	< 2	4.4	2.2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2

Ethylbenzene

Methyl isobutyl ketone	< 2	< 2	< 2	< 2	< 2
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2

Toluene

Trichloroethene	< 2	< 2	< 2	< 2	47 D
Vinyl acetate	< 10	< 10	< 10	< 10	51 D
Vinyl chloride	< 2	< 2	< 2	< 2	< 10
Xylenes, total combined	< 10	< 10	< 10	< 10	< 2

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
---------------------------	-----	-----	-----	-----	-----

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
------------------------	----	----	----	----	----

-----  
Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI002SB001	EI002SB006	EI002SB06A	EI003MH004	EI003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93
<hr/>					
Analytes					
<hr/>					
Semivolatile Organic Compounds					
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA
<hr/>					
2,4-Dichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenylacetic acid / DCAA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA
<hr/>					
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA
<hr/>					
2-Methylphenol / o-Cresol	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: E1002SB001 E1002SB006 E1002SB06A E1003MW004 E1003SB001  
Depth (feet): -9999 -9999 -9999 -9999 -9999  
Sample Date: 12/6/93 12/15/93 1/23/94 2/16/94 11/30/93

Analytes

Semivolatle Organic Compounds  
3,3'-Dichlorobenzidine  
3-Nitroaniline  
4-Bromophenylphenyl ether  
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol  
4-Chloroaniline  
  
4-Chlorophenylphenyl ether  
4-Methylphenol / p-Cresol  
4-Nitroaniline  
4-Nitrophenol  
Acenaphthene  
  
Acenaphthylene  
Anthracene  
Benzo[a]anthracene  
Benzo[a]pyrene  
Benzo[b]fluoranthene  
  
Benzo[def]phenanthrene  
Benzo[g,h,i]perylene  
Benzo[k]fluoranthene

NA NA NA NA NA  
NA NA NA NA NA  
NA NA NA NA NA  
NA NA NA NA NA  
NA NA NA NA NA  
  
NA NA NA NA NA  
NA NA NA NA NA  
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NA NA NA NA NA  
NA NA NA NA NA  
NA NA NA NA NA  
NA NA NA NA NA  
NA NA NA NA NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1002SB001	E1002SB006	E1002SB06A	E1003MW004	E1003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93
Analytes					
Semivolatile Organic Compounds					
Benzoic acid	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
Butylbenzyl phthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA
Di-N-butyl phthalate	NA	NA	NA	NA	NA
Di-N-octyl phthalate	NA	NA	NA	NA	NA
Dibenz[ah]anthracene	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA
Hexachloro-1,3-butadiene	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: EI002SB001 EI002SB006 EI002SB06A EI003MW004 EI003SB001  
Depth (feet): -9999 -9999 -9999 -9999 -9999  
Sample Date: 12/6/93 12/15/93 1/23/94 2/16/94 11/30/93

Analytes

Semivolatiles Organic Compounds

Isophorone  
N-Nitrosodi-N-propylamine  
N-Nitrosodiphenylamine  
Naphthalene  
Nitrobenzene

Pentachlorophenol

Pentacosane

Phenanthrene

Phenol

Phosphoric acid triphenyl ester

bis(2-Chloroethoxy)methane

bis(2-Chloroethyl)ether

bis(2-Chloroisopropyl)ether

bis(2-Ethylhexyl)phthalate

Pesticides/PCBs

2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane

2,2-bis(p-Chlorophenyl)-1,1-dichloroethane

2,2-bis(p-Chlorophenyl)-1,1-dichloroethene

Aldrin

Isophorone	NA	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA
Pentachlorophenol	NA	NA	NA	NA	NA
Pentacosane	2.1	7.29	/?	1.75	6.61
Phenanthrene	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA
Phosphoric acid triphenyl ester	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1002SB001	E1002SB006	E1002SB06A	E1003MW004	E1003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93
Analytes					
Pesticides/PCBs					
Dieldrin	NA	NA	NA	NA	NA
Dimethoate	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA
Endrin aldehyde	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA
Heptachlor epoxide	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA
PCB 1016	NA	NA	NA	NA	NA
PCB 1221	NA	NA	NA	NA	NA
PCB 1232	NA	NA	NA	NA	NA
PCB 1242	NA	NA	NA	NA	NA
PCB 1248	NA	NA	NA	NA	NA
PCB 1254	NA	NA	NA	NA	NA
PCB 1260	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1002S8001	E1002S8006	E1002S806A	E1003MW004	E1003S8001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93
Analytes					
Pesticides/PCBs					
alpha-Benzenehexachloride	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA
alpha-Endosulfan	NA	NA	NA	NA	NA
beta-Benzenehexachloride	NA	NA	NA	NA	NA
beta-Endosulfan	NA	NA	NA	NA	NA
delta-Benzenehexachloride	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	NA	NA	NA	NA
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	NA	NA	NA	NA
2,4-Dichlorophenoxyacetic acid / 2,4-D	NA	NA	NA	NA	NA
2,4-Dinitro-6-sec-butylphenol / Dinoseb	NA	NA	NA	NA	NA
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA	NA
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	NA	NA	NA	NA	NA
245TP / Silvex	NA	NA	NA	NA	NA
Dalapon / alpha,alpha-Dichloropropionic acid	NA	NA	NA	NA	NA
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	NA	NA
Mecoprop	NA	NA	NA	NA	NA
Metals					
Aluminum	83.9	< 40	NA	NA	< 40

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1002SB001	E1002SB006	E1002SB06A	E1003MW004	E1003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93
Analytes					
-----					
Metals					
Aluminum (Filtered)	NA	NA	NA	NA	NA
Antimony	< 3.05	50.7	NA	NA	< 3.05
Antimony (Filtered)	NA	NA	NA	NA	NA
Arsenic	< 2.5	50	NA	NA	< 2.5
Arsenic (Filtered)	NA	NA	NA	NA	NA
Barium	< 25	< 25	NA	NA	< 25
Barium (Filtered)	NA	NA	NA	NA	NA
Beryllium	< 5	< 5	NA	NA	< 5
Beryllium (Filtered)	NA	NA	NA	NA	NA
Boron	NA	NA	NA	NA	NA
Cadmium	< 5	< 5	NA	NA	< 5
Cadmium (Filtered)	NA	NA	NA	NA	NA
Calcium	969	170	NA	NA	142
Calcium (Filtered)	NA	NA	NA	NA	NA
Chromium	< 10	< 10	NA	NA	< 10
Chromium (Filtered)	NA	NA	NA	NA	NA
Cobalt	< 20	< 20	NA	NA	< 20
Cobalt (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1002SB001	E1002SB006	E1002SB06A	E1003MW004	E1003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93

Analytes

Metals

Copper	< 5	< 5	NA	NA	< 5
Copper (Filtered)	NA	NA	NA	NA	NA
Cyanide	< 2.5	< 2.5	NA	NA	< 2.5
Iron	204	< 45	NA	NA	< 45
Iron (Filtered)	NA	NA	NA	NA	NA
Lead	< 2	56	NA	NA	11.1
Lead (Filtered)	NA	NA	NA	NA	NA
Magnesium	273	< 50 /1	NA	NA	< 50
Magnesium (Filtered)	NA	NA	NA	NA	NA
Manganese	5.12	< 5	NA	NA	< 5
Manganese (Filtered)	NA	NA	NA	NA	NA
Mercury	< .2	< .2	NA	NA	< .2
Nickel	< 15	< 15	NA	NA	< 15
Nickel (Filtered)	NA	NA	NA	NA	NA
Potassium	< 550	< 550	NA	NA	< 550
Potassium (Filtered)	NA	NA	NA	NA	NA
Selenium	NA	< 2.5	NA	NA	< 2.5
Selenium (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1002SB001	E1002SB006	E1002SB06A	E1003MW004	E1003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93
Analytes					
Metals					
Silver	< 5	< 5	NA	NA	< 5
Silver (Filtered)	NA	NA	NA	NA	NA
Sodium	241	108 /1	NA	NA	256
Sodium (Filtered)	NA	NA	NA	NA	NA
Thallium	< 2.5	< 2.5	NA	NA	< 2.5
Thallium (Filtered)	NA	NA	NA	NA	NA
Vanadium	< 10	< 10	NA	NA	< 10
Vanadium (Filtered)	NA	NA	NA	NA	NA
Zinc	< 20	< 20	NA	NA	< 20
Zinc (Filtered)	NA	NA	NA	NA	NA
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	NA
Ammonia	NA	NA	NA	NA	NA
Biological oxygen demand	NA	NA	NA	NA	NA
Chemical oxygen demand	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA
Diesel fuel	< .4	< .4 /?	NA	< .4	28 D
Fluoride	NA	NA	NA	NA	NA
Gasoline / Gasoline, regular	< .4	< .4 /?	NA	< .4	21

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI002SB001	EI002SB006	EI002SB06A	EI003MW004	EI003SB001
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/6/93	12/15/93	1/23/94	2/16/94	11/30/93

Analytes

-----

Landfill Parameters

Nitrite, nitrate-non specific

Sulfate

Total dissolved solids

Total organic carbon

Total recoverable phenolics

NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA

-----

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1004SB002	E1005SB005	E1006SB006	E1006SS005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
-----					
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	NA	NA	NA	< 2
1,1,2,2-Tetrachloroethane	< 2	NA	NA	NA	< 2
1,1,2-Trichloroethane	< 2	NA	NA	NA	< 2
1,1-Dichloroethane	< 2	NA	NA	NA	< 2
1,1-Dichloroethene	< 2	NA	NA	NA	< 2
-----					
1,2-Dichloroethane	< 2	NA	NA	NA	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	NA	NA	NA	< 2
1,2-Dichloropropane	< 2	NA	NA	NA	< 2
2-Butanone	< 10	NA	NA	NA	< 10
2-Chloroethyl vinyl ether	< 10	NA	NA	NA	< 10
-----					
2-Hexanone	< 10	NA	NA	NA	< 10
Acetone	< 10	NA	NA	NA	< 10
Benzene	< 2	NA	NA	NA	< 2
Bromodichloromethane	< 2	NA	NA	NA	< 2
Bromoform	< 2	NA	NA	NA	< 2
-----					
Bromomethane	< 2	NA	NA	NA	< 2
Carbon disulfide	< 10	NA	NA	NA	< 10
Carbon tetrachloride	< 2	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: MW17  
Depth (feet): -9999  
Sample Date: 1/29/94

Analytes

-----  
Volatile Organic Compounds

Chlorobenzene	< 2	NA	NA	< 2
Chloroethane	< 10	NA	NA	< 10
Chloroform	4.6	NA	NA	< 2
Chloromethane	< 2	NA	NA	< 2
Dibromochloromethane	< 2	NA	NA	< 2

Ethylbenzene

Methyl isobutyl ketone

Methylene chloride

Styrene

Tetrachloroethene

Toluene

Trichloroethene

Vinyl acetate

Vinyl chloride

Xylenes, total combined

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

Semivolatile Organic Compounds

1,2,4-Trichlorobenzene

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1004SB002	E1005SB005	E1006SB006	E1006SS005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
<hr/>					
Analytes					
<hr/>					
Semivolatile Organic Compounds					
1,2-Dichlorobenzene	< 2	NA	NA	NA	< 2
1,3-Dichlorobenzene	< 2	NA	NA	NA	< 2
1,4-Dichlorobenzene	< 2	NA	NA	NA	< 2
2,4,5-Trichlorophenol	< 2	NA	NA	NA	< 2
2,4,6-Trichlorophenol	< 2	NA	NA	NA	< 2
<hr/>					
2,4-Dichlorophenol	< 2	NA	NA	NA	< 2
2,4-Dichlorophenylacetic acid / DCAA	NA	NA	NA	NA	.602
2,4-Dimethylphenol	< 2	NA	NA	NA	< 2
2,4-Dinitrophenol	< 30	NA	NA	NA	< 30
2,4-Dinitrotoluene	< 2	NA	NA	NA	< 2
<hr/>					
2,6-Dinitrotoluene	< 2	NA	NA	NA	< 2
2-Chloronaphthalene	< 2	NA	NA	NA	< 2
2-Chlorophenol	< 2	NA	NA	NA	< 2
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	< 20	NA	NA	NA	< 20
2-Methylnaphthalene	< 2	NA	NA	NA	< 2
<hr/>					
2-Methylphenol / o-Cresol	< 2	NA	NA	NA	< 2
2-Nitroaniline	< 10	NA	NA	NA	< 10
2-Nitrophenol	< 2	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data qualifiers are defined in Table C1

Table D6A:

**Note:** Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI004SB002	EI005SB005	EI006SB006	EI006SS005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
Analytes					
Semivolatile Organic Compounds					
Benzoic acid	< 20	NA	NA	NA	< 20
Benzyl alcohol	< 2	NA	NA	NA	< 2
Butylbenzyl phthalate	< 2	NA	NA	NA	< 2
Carbazole	< 2	NA	NA	NA	< 2
Chrysene	< 2	NA	NA	NA	< 2
Di-N-butyl phthalate	< 2	NA	NA	NA	< 2
Di-N-octyl phthalate	< 2	NA	NA	NA	< 2
Dibenz[ah]anthracene	< 2	NA	NA	NA	< 2
Dibenzofuran	< 2	NA	NA	NA	< 2
Diethyl phthalate	< 2	NA	NA	NA	< 2
Dimethyl phthalate	< 2	NA	NA	NA	< 2
Fluoranthene	< 2	NA	NA	NA	< 2
Fluorene	< 2	NA	NA	NA	< 2
Hexachloro-1,3-butadiene	< 2	NA	NA	NA	< 2
Hexachlorobenzene	< 2	NA	NA	NA	< 2
Hexachlorocyclopentadiene	< 10	NA	NA	NA	< 10
Hexachloroethane	< 2	NA	NA	NA	< 2
Indeno[1,2,3-c,d]pyrene	< 2	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: Depth (feet): Sample Date:	EI004S8002 -9999 12/18/93	EI005S8005 -9999 1/4/94	EI006S8006 -9999 12/21/93	EI006SS005 -9999 11/29/93	MW17 -9999 1/29/94
Analytes					
-----					
Semivolatile Organic Compounds					
Isophorone	< 2	NA	NA	NA	< 2
N-Nitrosodi-N-propylamine	< 2	NA	NA	NA	< 2
N-Nitrosodiphenylamine	< 2	NA	NA	NA	< 2
Naphthalene	< 2	NA	NA	NA	< 2
Nitrobenzene	< 2	NA	NA	NA	< 2
Pentachlorophenol	< 10	NA	NA	NA	< 10
Pentacosane	6.71	7.61 /L	NA	NA	NA
Phenanthrene	< 2	NA	NA	NA	< 2
Phenol	< 2	NA	NA	NA	< 2
Phosphoric acid triphenyl ester	NA	NA	NA	NA	8.26
bis(2-Chloroethoxy)methane	< 2	NA	NA	NA	< 2
bis(2-Chloroethyl)ether	< 2	NA	NA	NA	< 2
bis(2-Chloroisopropyl)ether	< 2	NA	NA	NA	< 2
bis(2-Ethylhexyl)phthalate	< 2	NA	NA	NA	< 2
Pesticides/PCBs					
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	< .007	NA	NA	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	< .005	NA	NA	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	< .007	NA	NA	< .007
Aldrin	NA	< .005	NA	NA	< .005

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	EI004S8002	EI005S8005	EI006S8006	EI006SS005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
Analytes					
-----					
Pesticides/PCBs					
Dieldrin	NA	< .005	NA	NA	< .005
Dimethoate	NA	NA	NA	NA	< .25
Endosulfan sulfate	NA	< .005	NA	NA	< .005
Endrin	NA	< .005	NA	NA	< .005
Endrin aldehyde	NA	< .02	NA	NA	< .02
Endrin ketone	NA	< .006	NA	NA	< .006
Heptachlor	NA	< .005	NA	NA	< .005
Heptachlor epoxide	NA	< .005	NA	NA	< .005
Lindane	NA	< .005	NA	NA	< .005
Methoxychlor	NA	< .009	NA	NA	< .009
PCB 1016	NA	< .13	NA	NA	< .13
PCB 1221	NA	< .13	NA	NA	< .13
PCB 1232	NA	< .13	NA	NA	< .13
PCB 1242	NA	< .13	NA	NA	< .13
PCB 1248	NA	< .13	NA	NA	< .13
PCB 1254	NA	< .13	NA	NA	< .13
PCB 1260	NA	< .13	NA	NA	< .13
Toxaphene	NA	< .6	NA	NA	< .6

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: MW17  
Depth (feet): -9999  
Sample Date: 1/29/94

Analytes	EI004SB002 -9999 12/18/93	EI005SB005 -9999 1/4/94	EI006SB006 -9999 12/21/93	EI006SS005 -9999 11/29/93	MW17 -9999 1/29/94
Pesticides/PCBs					
alpha-Benzenehexachloride	NA	< .005	NA	NA	< .005
alpha-Chlordane	NA	< .005	NA	NA	< .005
alpha-Endosulfan	NA	< .005	NA	NA	< .005
beta-Benzenehexachloride	NA	< .005	NA	NA	< .005
beta-Endosulfan	NA	< .005	NA	NA	< .005
delta-Benzenehexachloride	NA	< .005	NA	NA	< .005
gamma-Chlordane	NA	< .005	NA	NA	< .005
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	NA	NA	NA	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	NA	NA	NA	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	NA	NA	NA	NA	< .1
2,4-Dinitro-6-sec-butylphenol / Dinoseb	NA	NA	NA	NA	< .1
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	NA	NA	NA	NA	< .1
245TP / Silvex	NA	NA	NA	NA	< .1
Dalapon / alpha,alpha-Dichloropropionic acid	NA	NA	NA	NA	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	NA	< 3
Mecoprop	NA	NA	NA	NA	< 3
Metals					
Aluminum	41.3	NA	< 40	< 40	< 40

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1004SB002	E1005SB005	E1006SB006	E1006SB005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
Analytes					
Metals					
Aluminum (Filtered)	NA	NA	NA	NA	< 40 F
Antimony	< 3.05	NA	< 3.05	< 3.05	< 3
Antimony (Filtered)	NA	NA	NA	NA	< 3 F
Arsenic	< 2.5	NA	< 2.5	< 2.5	< 2.5
Arsenic (Filtered)	NA	NA	NA	NA	< 2.5 F
Barium	< 25	NA	< 25	< 25	< 25
Barium (Filtered)	NA	NA	NA	NA	< 25 F
Beryllium	< 5	NA	< 5	< 5	< 5 /J
Beryllium (Filtered)	NA	NA	NA	NA	< 5 F/J
Boron	NA	NA	NA	NA	< 50
Cadmium	< 5	NA	< 5	< 5	< 5
Cadmium (Filtered)	NA	NA	NA	NA	< 5 F
Calcium	279	NA	959	138	< 100
Calcium (Filtered)	NA	NA	NA	NA	< 100 F
Chromium	< 10	NA	196	< 10	< 10
Chromium (Filtered)	NA	NA	NA	NA	< 10 F
Cobalt	< 20	NA	< 20	< 20	< 20
Cobalt (Filtered)	NA	NA	NA	NA	< 20 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name: MW17  
Depth (feet): -9999  
Sample Date: 1/29/94

Analytes		EI004SB002 -9999 12/18/93	EI005SB005 -9999 1/4/94	EI006SB006 -9999 12/21/93	EI006SS005 -9999 11/29/93	MW17 -9999 1/29/94
Metals						
Copper		< 5	NA	239 /J	< 5	< 5
Copper (Filtered)		NA	NA	NA	NA	< 5 F
Cyanide		54.3	NA	< 2.5	< 2.5	< 2.5
Iron		54.5	NA	54.9	< 45	< 45
Iron (Filtered)		NA	NA	NA	NA	< 45 F
Lead		< 2	NA	< 2	< 2	< 2
Lead (Filtered)		NA	NA	NA	NA	< 2 F
Magnesium		< 50 /I	NA	377	< 50	< 50
Magnesium (Filtered)		NA	NA	NA	NA	< 50 F
Manganese		< 5	NA	< 5	< 5	< 5
Manganese (Filtered)		NA	NA	NA	NA	< 5 F
Mercury		< .2	NA	< .2	< .2	< .2
Nickel		< 15	NA	< 15	< 15	< 15
Nickel (Filtered)		NA	NA	NA	NA	< 15 F
Potassium		< 550	NA	< 550	< 550	< 550
Potassium (Filtered)		NA	NA	NA	NA	< 550 F
Selenium		< 2.5	NA	< 2.5	< 2.5	< 2.5
Selenium (Filtered)		NA	NA	NA	NA	< 2.5 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1004SB002	E1005SB005	E1006SB006	E1006SS005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
Analytes					
Metals					
Silver	< 5	NA	47.4 /J	< 5	< 5
Silver (Filtered)	NA	NA	NA	NA	< 5 F
Sodium	< 100 /I	NA	312 /I	122	< 100
Sodium (Filtered)	NA	NA	NA	NA	125 F
Thallium	< 2.5	NA	< 2.5	< 2.5	< 2.5
Thallium (Filtered)	NA	NA	NA	NA	< 2.5 F
Vanadium	< 10	NA	478 D	NA	< 10 /J
Vanadium (Filtered)	NA	NA	NA	NA	< 10 F/J
Zinc	< 20	NA	< 20 /I	< 20	< 20
Zinc (Filtered)	NA	NA	NA	NA	< 20 F
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	14000
Ammonia	NA	NA	NA	NA	< 50
Biological oxygen demand	NA	NA	NA	NA	< 1000
Chemical oxygen demand	NA	NA	NA	NA	< 5000
Chloride	NA	NA	NA	NA	< 500
Diesel fuel	< .4 /?	24 D/L	NA	NA	NA
Fluoride	NA	NA	NA	NA	< 500
Gasoline / Gasoline, regular	< .4 /?	19 /L	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6A:  
Summary of Rinse Blank Samples Analytical Results  
for EI Site 1 through EI Site 6 and MW17

Sample Name:	E1004SB002	E1005SB005	E1006SB006	E1006SS005	MW17
Depth (feet):	-9999	-9999	-9999	-9999	-9999
Sample Date:	12/18/93	1/4/94	12/21/93	11/29/93	1/29/94
Analytes					
Landfill Parameters					
Nitrite, nitrate-non specific	NA	NA	NA	NA	< 20
Sulfate	NA	NA	NA	NA	< 5000
Total dissolved solids	NA	NA	NA	NA	35000
Total organic carbon	NA	NA	NA	NA	3100
Total recoverable phenolics	NA	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SW001	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/9/94	11/30/93
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA
1,2-Dichloroethylenes (cis and trans isomers)	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA
2-Butanone	NA	NA	NA	NA
2-Chloroethyl vinyl ether	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA
Acetone	NA	NA	NA	NA
Benzene	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA
Bromoform	NA	NA	NA	NA
Bromomethane	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA
Carbon tetrachloride	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SH001	SM019SS006	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/9/94	1/10/94	11/30/93
Analytes					
-----					
Volatiles Organic Compounds					
Chloroethane	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA
Chloromethane	NA	NA	NA	NA	NA
Dibromochloromethane	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA
Methyl isobutyl ketone	NA	NA	NA	NA	NA
Methylene chloride	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA	NA
Vinyl acetate	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA
Xylenes, total combined	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA
Semivolatiles Organic Compounds					
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SW001	SM019SS006	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/10/94	1/9/94	11/30/93
Analytes					
-----					
Semivolatile Organic Compounds					
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenylacetic acid / DCAA	.954	1.05	.88	NA	1.24
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA
2-Methylphenol / o-Cresol	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA
4-Bromophenylphenyl ether	NA	NA	NA	NA	NA

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SW001	SM019SS006	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/10/94	1/9/94	11/30/93
Analytes					
Semivolatle Organic Compounds					
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA
4-Chlorophenylphenyl ether	NA	NA	NA	NA	NA
4-Methylphenol / p-Cresol	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA
Benzo[a]anthracene	NA	NA	NA	NA	NA
Benzo[a]pyrene	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	NA	NA	NA	NA	NA
Benzo[def]phenanthrene	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
Butylbenzyl phthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SW001	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/9/94	11/30/93
Analytes				
Semivolatiles Organic Compounds				
Chrysene	NA	NA	NA	NA
Di-N-butyl phthalate	NA	NA	NA	NA
Di-N-octyl phthalate	NA	NA	NA	NA
Dibenz[ah]anthracene	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA
Hexachloro-1,3-butadiene	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: Sample Date:	SM018SE003 1/11/94	SM018SH001 1/11/94	SM019SS006 1/10/94	SM019SS006 1/9/94	SM020SB001 11/30/93
Analytes					
Semivolatile Organic Compounds					
Pentachlorophenol	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA
Phosphoric acid triphenyl ester	8.1	8.01	7.99	NA	7.72
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA
Pesticides/PCBs					
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	NA	< .007	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	< .005	< .005	NA	< .005	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	< .007	< .007	NA	< .007	< .007
Aldrin	< .005	< .005	NA	< .005	< .005
Dieldrin	< .005	< .005	NA	< .005	< .005
Dimethoate	< .25	< .25	< .25	NA	< .25
Endosulfan sulfate	< .005	< .005	NA	< .005	< .005
Endrin	< .005	< .005	NA	< .005	< .005
Endrin aldehyde	< .02	< .02	NA	< .02	< .02
Endrin ketone	NA	NA	NA	< .006	< .006
Heptachlor	< .005	< .005	NA	< .005	< .005

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1



Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: Sample Date:	SM018SE003 1/11/94	SM018SW001 1/11/94	SM019SS006 1/10/94	SM019SS006 1/9/94	SM020SB001 11/30/93
Analytes					
Pesticides/PCBs					
Heptachlor epoxide	< .005	< .005	NA	< .005	< .005
Lindane	< .005	< .005	NA	< .005	< .005
Methoxychlor	< .009	< .009	NA	< .009	< .009
PCB 1016	< .13	< .13	NA	< .13	NA
PCB 1221	< .13	< .13	NA	< .13	NA
PCB 1232	< .13	< .13	NA	< .13	NA
PCB 1242	< .13	< .13	NA	< .13	NA
PCB 1248	< .13	< .13	NA	< .13	NA
PCB 1254	< .13	< .13	NA	< .13	NA
PCB 1260	< .13	< .13	NA	< .13	NA
Toxaphene	< .6	< .6	NA	< .6	< .6
alpha-Benzenhexachloride	< .005	< .005	NA	< .005	< .005
alpha-Chlordane	< .005	< .005	NA	< .005	< .005
alpha-Endosulfan	< .005	< .005	NA	< .005	< .005
beta-Benzenhexachloride	< .005	< .005	NA	< .005	< .005
beta-Endosulfan	< .005	< .005	NA	< .005	< .005
delta-Benzenhexachloride	< .005	< .005	NA	< .005	< .005
gamma-Chlordane	< .005	< .005	NA	< .005	< .005
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	< .1	< .1	< .1	NA	< .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: Sample Date:	SM018SE003 1/11/94	SM018SW001 1/11/94	SM019SS006 1/10/94	SM019SS006 1/9/94	SM020S8001 11/30/93
Analytes					
Herbicides					
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	NA	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	< .1	< .1	< .1	NA	< .1
2,4-Dinitro-6-sec-butylphenol / Dinoseb	< .1	< .1	< .1	NA	< .1
2-(2,4-Dichlorophenoxy)propionic acid	< .1	< .1	< .1	NA	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	< .1	< .1	< .1	NA	< .1
245TP / Silvex	< .1	< .1	< .1	NA	< .1
Dalapon / alpha,alpha-Dichloropropionic acid	< .1	< .1	< .1	NA	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	< 3	< 3	< 3	NA	< 3
Mecoprop	< 3	< 3	< 3	NA	< 3
Metals					
Aluminum	< 40	< 40	NA	NA	NA
Aluminum (Filtered)	NA	< 40	NA	NA	NA
Antimony	< 3	7.6	NA	NA	NA
Antimony (Filtered)	NA	< 3	NA	NA	NA
Arsenic	< 2.5	< 2.5	NA	NA	NA
Arsenic (Filtered)	NA	< 2.5	NA	NA	NA
Barium	< 25	< 25	NA	NA	NA
Barium (Filtered)	NA	< 25	NA	NA	NA
Beryllium	< 5	< 5	NA	NA	NA
Beryllium (Filtered)	NA	< 5	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SW001	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/9/94	11/30/93
Analytes				
Metals				
Boron	NA	NA	NA	NA
Cadmium	< 5	< 5	NA	NA
Cadmium (Filtered)	NA	< 5 F	NA	NA
Calcium	< 100	< 100	NA	NA
Calcium (Filtered)	NA	< 100 F	NA	NA
Chromium	< 10	< 10	NA	NA
Chromium (Filtered)	NA	< 10 F	NA	NA
Cobalt	< 20	< 20	NA	NA
Cobalt (Filtered)	NA	< 20 F	NA	NA
Copper	< 5	< 5	NA	NA
Copper (Filtered)	NA	< 5 F	NA	NA
Cyanide	< 2.5	< 2.5	NA	NA
Iron	< 45	< 45	NA	NA
Iron (Filtered)	NA	< 45 F	NA	NA
Lead	< 2	< 2	NA	NA
Lead (Filtered)	NA	< 2 F	NA	NA
Magnesium	< 50	< 50	NA	NA
Magnesium (Filtered)	NA	< 50 F	NA	NA
Manganese	< 5	< 5	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SW001	SM019SS006	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/10/94	1/9/94	11/30/93
Analytes					
-----					
Metals					
Manganese (Filtered)	NA	< 5	NA	NA	NA
Mercury	< .2	< .2	NA	NA	NA
Mercury (Filtered)	NA	NA	NA	NA	NA
Nickel	< 15	< 15	NA	NA	NA
Nickel (Filtered)	NA	< 15	NA	NA	NA
Potassium	< 550	< 550	NA	NA	NA
Potassium (Filtered)	NA	< 550	NA	NA	NA
Selenium	< 2.5	< 2.5	NA	NA	NA
Selenium (Filtered)	NA	< 2.5	NA	NA	NA
Silver	< 5	< 5	NA	NA	NA
Silver (Filtered)	NA	< 5	NA	NA	NA
Sodium	< 100	< 100	NA	NA	NA
Sodium (Filtered)	NA	< 100	NA	NA	NA
Thallium	< 2.5	< 2.5	NA	NA	NA
Thallium (Filtered)	NA	< 2.5	NA	NA	NA
Vanadium	< 10	< 10	NA	NA	NA
Vanadium (Filtered)	NA	< 10	NA	NA	NA
Zinc	< 20	< 20	NA	NA	NA
Zinc (Filtered)	NA	< 20	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM018SE003	SM018SH001	SM019SS006	SM019SS006	SM020SB001
Sample Date:	1/11/94	1/11/94	1/10/94	1/9/94	11/30/93
Analytes					
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	NA
Ammonia	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA
Fluoride	NA	NA	NA	NA	NA
Nitrite, nitrate-non specific	NA	NA	NA	NA	NA
Sulfate	NA	NA	NA	NA	NA
Total dissolved solids	NA	NA	NA	NA	NA
Total organic carbon	NA	NA	NA	NA	NA
Total recoverable phenolics	NA	NA	NA	NA	NA
Others					
Total hardness	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SW001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA
1,2-Dichloroethylenes (cis and trans isomers)	NA	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA
2-Butanone	NA	NA	NA	NA	NA
2-Chloroethyl vinyl ether	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA
Bromoform	NA	NA	NA	NA	NA
Bromomethane	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA
Carbon tetrachloride	NA	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SW001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA
Chloromethane	NA	NA	NA	NA	NA
Dibromochloromethane	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA
Methyl isobutyl ketone	NA	NA	NA	NA	NA
Methylene chloride	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA	NA
Vinyl acetate	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA
Xylenes, total combined	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SW001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
Semivolatile Organic Compounds					
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenylacetic acid / DCAA	1.04	.687	1.04	.905	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA
2-Methylphenol / o-Cresol	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA
4-Bromophenylphenyl ether	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SW001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
Semivolatile Organic Compounds					
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA
4-Chlorophenylphenyl ether	NA	NA	NA	NA	NA
4-Methylphenol / p-Cresol	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA
Benzo[a]anthracene	NA	NA	NA	NA	NA
Benzo[a]pyrene	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	NA	NA	NA	NA	NA
Benzo[def]phenanthrene	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
Butylbenzyl phthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SW001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
Semivolatiles Organic Compounds					
Chrysene	NA	NA	NA	NA	NA
Di-N-butyl phthalate	NA	NA	NA	NA	NA
Di-N-octyl phthalate	NA	NA	NA	NA	NA
Dibenz[ah]anthracene	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA
Hexachloro-1,3-butadiene	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: Sample Date:	SM020SE002 2/15/94	SM020SS005 12/21/93	SM020SW001 2/15/94	SM021SS003 1/5/94	SM022SB002 1/6/94
Analytes					
Semivolatile Organic Compounds					
Pentachlorophenol	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA
Phosphoric acid triphenyl ester	7.34	7.6	6.75	6.96	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA
Pesticides/PCBs					
2,2-bis(p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	< .007	< .007	NA
2,2-bis(p-chlorophenyl)-1,1-dichloroethane	< .005	< .005	< .005	< .005	NA
2,2-bis(p-chlorophenyl)-1,1-dichloroethene	< .007	< .007	< .007	< .007	NA
Aldrin	< .005	< .005	< .005	< .005	NA
Dieldrin	< .005	< .005	< .005	< .005	NA
Dimethoate	< .25	< .25	< .25	< .25	NA
Endosulfan sulfate	< .005	< .005	< .005	< .005	NA
Endrin	< .005	< .005	< .005	< .005	NA
Endrin aldehyde	< .02	< .02	< .02	< .02	NA
Endrin ketone	< .006	< .006	< .006	< .006	NA
Heptachlor	< .005	< .005	< .005	< .005	NA

Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SW001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
<b>Analytes</b>					
<b>Pesticides/PCBs</b>					
Heptachlor epoxide	< .005	< .005	< .005	< .005	NA
Lindane	< .005	< .005	< .005	< .005	NA
Methoxychlor	< .009	< .009	< .009	< .009	NA
PCB 1016	< .13	< .13	< .13	< .13	NA
PCB 1221	< .13	< .13	< .13	< .13	NA
PCB 1232	< .13	< .13	< .13	< .13	NA
PCB 1242	< .13	< .13	< .13	< .13	NA
PCB 1248	< .13	< .13	< .13	< .13	NA
PCB 1254	< .13	< .13	< .13	< .13	NA
PCB 1260	< .13	< .13	< .13	< .13	NA
<b>Toxaphene</b>					
alpha-Benzenehexachloride	< .6	< .6	< .6	< .6	NA
alpha-Chlordane	< .005	< .005	< .005	< .005	NA
alpha-Endosulfan	< .005	< .005	< .005	< .005	NA
beta-Benzenehexachloride	< .005	< .005	< .005	< .005	NA
<b>Herbicides</b>					
beta-Endosulfan	< .005	< .005	< .005	< .005	NA
delta-Benzenehexachloride	< .005	< .005	< .005	< .005	NA
gamma-Chlordane	< .005	< .005	< .005	< .005	NA
(2,4,5-Trichlorophenoxy)acetic acid / 245T	< .1	< .1	< .1	< .1	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SH001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
<b>Herbicides</b>					
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	< .1	NA
2,4-Dichlorophenoxyacetic acid / 2,4-D	< .1	< .1 / J	< .1	< .1	NA
2,4-Dinitro-6-sec-butylphenol / Dinoseb	< .1	< .1	< .1	< .1	NA
2-(2,4-Dichlorophenoxy)propionic acid	< .1	< .1	< .1	< .1	NA
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	< .1	< .1	< .1	< .1	NA
<b>245TP / Silvex</b>					
Dalapon / alpha,alpha-Dichloropropionic acid	< .1	< .1	< .1	< .1	NA
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	< .1	< .1	< .1	< .1	NA
Mecoprop	< 3	< 3	< 3	< 3	NA
<b>Metals</b>					
Aluminum	NA	NA	NA	NA	< 40
Aluminum (Filtered)	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	< 3
Antimony (Filtered)	NA	NA	NA	NA	NA
Arsenic	NA	NA	NA	NA	< 2.5
<b>Arsenic (Filtered)</b>					
Barium	NA	NA	NA	NA	NA
Barium (Filtered)	NA	NA	NA	NA	< 25
Beryllium	NA	NA	NA	NA	NA
Beryllium (Filtered)	NA	NA	NA	NA	< 5
					NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM020SE002 SM020SS005 SM020SH001 SM021SS003 SM022SB002  
Sample Date: 2/15/94 12/21/93 2/15/94 1/5/94 1/6/94

Analytes

Metals

Boron	NA	NA	NA	NA	NA
Cadmium	NA	NA	NA	NA	NA
Cadmium (Filtered)	NA	NA	NA	NA	< 5
Calcium	NA	NA	NA	NA	NA
Calcium (Filtered)	NA	NA	NA	NA	128
Chromium	NA	NA	NA	NA	NA
Chromium (Filtered)	NA	NA	NA	NA	< 10
Cobalt	NA	NA	NA	NA	NA
Cobalt (Filtered)	NA	NA	NA	NA	< 20
Copper	NA	NA	NA	NA	NA
Copper (Filtered)	NA	NA	NA	NA	< 5
Cyanide	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	< 2.5
Iron (Filtered)	NA	NA	NA	NA	< 45
Lead	NA	NA	NA	NA	NA
Lead (Filtered)	NA	NA	NA	NA	18
Magnesium	NA	NA	NA	NA	NA
Magnesium (Filtered)	NA	NA	NA	NA	< 50
Manganese	NA	NA	NA	NA	NA
					< 5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SH001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
-----					
Metals					
Manganese (Filtered)	NA	NA	NA	NA	NA
Mercury	NA	NA	NA	NA	< .2
Mercury (Filtered)	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	< 15
Nickel (Filtered)	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	< 550 /1
Potassium (Filtered)	NA	NA	NA	NA	NA
Selenium	NA	NA	NA	NA	< 2.5
Selenium (Filtered)	NA	NA	NA	NA	NA
Silver	NA	NA	NA	NA	< 5
Silver (Filtered)	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	< 100 /1
Sodium (Filtered)	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	< 2.5
Thallium (Filtered)	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	< 10
Vanadium (Filtered)	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	< 20
Zinc (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM020SE002	SM020SS005	SM020SH001	SM021SS003	SM022SB002
Sample Date:	2/15/94	12/21/93	2/15/94	1/5/94	1/6/94
Analytes					
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	NA
Ammonia	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA
Fluoride	NA	NA	NA	NA	NA
Nitrite, nitrate-non specific	NA	NA	NA	NA	NA
Sulfate	NA	NA	NA	NA	NA
Total dissolved solids	NA	NA	NA	NA	NA
Total organic carbon	NA	NA	NA	NA	NA
Total recoverable phenolics	NA	NA	NA	NA	NA
Others					
Total hardness	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1



Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SW001	SM023S8004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	NA
1,1,2-Trichloroethane	NA	NA	NA	NA	NA
1,1-Dichloroethane	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA
1,2-Dichloroethane	NA	NA	NA	NA	NA
1,2-Dichloroethylenes (cis and trans isomers)	NA	NA	NA	NA	NA
1,2-Dichloropropane	NA	NA	NA	NA	NA
2-Butanone	NA	NA	NA	NA	NA
2-Chloroethyl vinyl ether	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA
Acetone	NA	NA	NA	NA	NA
Benzene	NA	NA	NA	NA	NA
Bromodichloromethane	NA	NA	NA	NA	NA
Bromoform	NA	NA	NA	NA	NA
Bromomethane	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA
Carbon tetrachloride	NA	NA	NA	NA	NA
Chlorobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: Sample Date:	SM022SE002 2/16/94	SM022SS006 1/6/94	SM022SW001 2/16/94	SM023SB004 12/9/93	SM023SE002 2/17/94
Analytes					
-----					
Volatiles Organic Compounds					
Chloroethane	NA	NA	NA	NA	NA
Chloroform	NA	NA	NA	NA	NA
Chloromethane	NA	NA	NA	NA	NA
Dibromochloromethane	NA	NA	NA	NA	NA
Ethylbenzene	NA	NA	NA	NA	NA
Methyl isobutyl ketone	NA	NA	NA	NA	NA
Methylene chloride	NA	NA	NA	NA	NA
Styrene	NA	NA	NA	NA	NA
Tetrachloroethene	NA	NA	NA	NA	NA
Toluene	NA	NA	NA	NA	NA
Trichloroethene	NA	NA	NA	NA	NA
Vinyl acetate	NA	NA	NA	NA	NA
Vinyl chloride	NA	NA	NA	NA	NA
Xylenes, total combined	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA
Semivolatiles Organic Compounds					
1,2,4-Trichlorobenzene	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SW001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
Semivolatile Organic Compounds					
1,4-Dichlorobenzene	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenol	NA	NA	NA	NA	NA
2,4-Dichlorophenylacetic acid / DCAA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	NA	NA	NA	NA
2-Chlorophenol	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA
2-Methylphenol / o-Cresol	NA	NA	NA	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA
2-Nitrophenol	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NA	NA	NA	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA
4-Bromophenylphenyl ether	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SW001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
Semivolatiles Organic Compounds					
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	NA	NA	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA
4-Chlorophenylphenyl ether	NA	NA	NA	NA	NA
4-Methylphenol / p-Cresol	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA
Acenaphthylene	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA
Benzo[a]anthracene	NA	NA	NA	NA	NA
Benzo[a]pyrene	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	NA	NA	NA	NA	NA
Benzo[def]phenanthrene	NA	NA	NA	NA	NA
Benzo[g,h,i]perylene	NA	NA	NA	NA	NA
Benzo[k]fluoranthene	NA	NA	NA	NA	NA
Benzoic acid	NA	NA	NA	NA	NA
Benzyl alcohol	NA	NA	NA	NA	NA
Butylbenzyl phthalate	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SW001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
Semivolatile Organic Compounds					
Chrysene	NA	NA	NA	NA	NA
Di-N-butyl phthalate	NA	NA	NA	NA	NA
Di-N-octyl phthalate	NA	NA	NA	NA	NA
Dibenz[ah]anthracene	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA
Diethyl phthalate	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA
Hexachloro-1,3-butadiene	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	NA	NA	NA	NA	NA
Hexachloroethane	NA	NA	NA	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	NA	NA	NA	NA
Isophorone	NA	NA	NA	NA	NA
N-Nitrosodi-N-propylamine	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA
Nitrobenzene	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SE002	SM022SS006	SM022SW001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
-----					
Semivolatile Organic Compounds					
Pentachlorophenol	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA
Phosphoric acid triphenyl ester	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	NA	NA	NA	NA
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	NA
-----					
Pesticides/PCBs					
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	NA	NA	NA	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	NA	NA	NA	NA
Aldrin	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA
Dimethoate	NA	NA	NA	NA	NA
Endosulfan sulfate	NA	NA	NA	NA	NA
Endrin	NA	NA	NA	NA	NA
Endrin aldehyde	NA	NA	NA	NA	NA
Endrin ketone	NA	NA	NA	NA	NA
Heptachlor	NA	NA	NA	NA	NA

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SW001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
Pesticides/PCBs					
Heptachlor epoxide	NA	NA	NA	NA	NA
Lindane	NA	NA	NA	NA	NA
Methoxychlor	NA	NA	NA	NA	NA
PCB 1016	NA	NA	NA	NA	NA
PCB 1221	NA	NA	NA	NA	NA
PCB 1232	NA	NA	NA	NA	NA
PCB 1242	NA	NA	NA	NA	NA
PCB 1248	NA	NA	NA	NA	NA
PCB 1254	NA	NA	NA	NA	NA
PCB 1260	NA	NA	NA	NA	NA
Toxaphene	NA	NA	NA	NA	NA
alpha-Benzenhexachloride	NA	NA	NA	NA	NA
alpha-Chlordane	NA	NA	NA	NA	NA
alpha-Endosulfan	NA	NA	NA	NA	NA
beta-Benzenhexachloride	NA	NA	NA	NA	NA
beta-Endosulfan	NA	NA	NA	NA	NA
delta-Benzenhexachloride	NA	NA	NA	NA	NA
gamma-Chlordane	NA	NA	NA	NA	NA
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM022SE002 SM022SS006 SM022SS001 SM023SE002 SM023SE004  
Sample Date: 2/16/94 1/6/94 2/16/94 12/9/93 2/17/94

-----  
Analytes

Herbicides

2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid  
2,4-Dichlorophenoxyacetic acid / 2,4-D  
2,4-Dinitro-6-sec-butylphenol / Dinoseb  
2-(2,4-Dichlorophenoxy)propionic acid  
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba

NA NA  
NA NA  
NA NA  
NA NA  
NA NA

245TP / Silvex

Dalapon / alpha,alpha-Dichloropropionic acid  
MCPA / (4-Chloro-2-methylphenoxy)acetic acid  
Mecoprop

NA NA  
NA NA  
NA NA  
NA NA

Metals

Aluminum  
Aluminum (Filtered)  
Antimony  
Antimony (Filtered)  
Arsenic

< 40  
NA  
< 3  
NA  
< 2.5  
  
< 40  
NA  
< 3  
NA  
< 2.5  
  
< 40  
NA  
< 3  
11.8  
< 2.5  
  
1850  
NA  
< 3.05  
NA  
< 2.5  
  
78.6  
NA  
< 3  
NA  
< 2.5

Arsenic (Filtered)

Barium

Barium (Filtered)

Beryllium

Beryllium (Filtered)

NA  
< 25  
NA  
< 5  
NA  
  
NA  
< 2.5  
< 25  
NA  
< 5  
NA  
  
NA  
< 2.5  
2010  
NA  
49.1  
NA  
  
NA  
< 25  
NA  
< 5  
NA  
  
NA  
< 25  
D  
NA  
< 5  
NA

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SM001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
Metals					
Boron	NA	NA	NA	NA	NA
Cadmium	< 5	< 5	< 5	47.2	< 5
Cadmium (Filtered)	NA	NA	< 5	NA	NA
Calcium	< 100	114	< 100	9700	< 100
Calcium (Filtered)	NA	NA	131	NA	NA
Chromium	< 10	< 10	< 10	185	< 10
Chromium (Filtered)	NA	NA	< 10	NA	NA
Cobalt	< 20	< 20	< 20	461	< 20
Cobalt (Filtered)	NA	NA	< 20	NA	NA
Copper	< 5	< 5	< 5	234	< 5
Copper (Filtered)	NA	NA	< 5	NA	NA
Cyanide	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Iron	< 45	< 45	< 45	922	< 45
Iron (Filtered)	NA	NA	< 45	NA	NA
Lead	< 2	11.1	< 2	< 2	< 2
Lead (Filtered)	NA	NA	< 2	NA	NA
Magnesium	< 50	< 50	< 50	9550	< 50
Magnesium (Filtered)	NA	NA	< 50	NA	NA
Manganese	< 5	< 5	< 5	464	< 5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM023SE002 SM022SS006 SM022SW001 SM023SB004 SM023SE002  
Sample Date: 2/16/94 1/6/94 2/16/94 12/9/93 2/17/94

Analytes

Metals

Manganese (Filtered)	NA	NA	< 5	F	NA	NA	< 550	NA
Mercury	< .2	< .2	< .2	F	< .2	< .2	< .2	< .2
Mercury (Filtered)	NA	NA	< .2	F	NA	NA	NA	NA
Nickel	< 15	< 15	< 15	F	< 15	470	< 15	< 15
Nickel (Filtered)	NA	NA	< 15	F	NA	NA	NA	NA
Potassium	< 550	< 550 /I	< 550	F	9740	< 550	< 550	< 550
Potassium (Filtered)	NA	NA	< 550	F	NA	NA	NA	NA
Selenium	< 2.5	< 2.5	< 2.5	F	< 2.5	< 2.5	< 2.5	< 2.5
Selenium (Filtered)	NA	NA	< 2.5	F	NA	NA	NA	NA
Silver	< 5	< 5	< 5	F	49	< 5	< 5	< 5
Silver (Filtered)	NA	NA	< 5	F	NA	NA	NA	NA
Sodium	< 100 /I	< 100 /I	102	/I	9800	< 100	< 100	/I
Sodium (Filtered)	NA	NA	138	F/I	NA	NA	NA	NA
Thallium	< 2.5	< 2.5	< 2.5	F	< 2.5	< 2.5	< 2.5	< 2.5
Thallium (Filtered)	NA	NA	< 2.5	F	NA	NA	NA	NA
Vanadium	< 10	< 10	< 10	F	467	< 10	< 10	< 10
Vanadium (Filtered)	NA	NA	< 10	F	NA	NA	NA	NA
Zinc	< 20	< 20	< 20	F	481	< 20	< 20	< 20
Zinc (Filtered)	NA	NA	< 20	F	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM022SE002	SM022SS006	SM022SW001	SM023SB004	SM023SE002
Sample Date:	2/16/94	1/6/94	2/16/94	12/9/93	2/17/94
Analytes					
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	NA
Ammonia	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA
Fluoride	NA	NA	NA	NA	NA
Nitrite, nitrate-non specific	NA	NA	NA	NA	NA
Sulfate	NA	NA	NA	NA	NA
Total dissolved solids	NA	NA	NA	NA	NA
Total organic carbon	NA	NA	NA	NA	NA
Total recoverable phenolics	NA	NA	NA	NA	NA
Others					
Total hardness	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SW002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	NA	NA	NA	NA	< 2
1,1,2,2-Tetrachloroethane	NA	NA	NA	NA	< 2
1,1,2-Trichloroethane	NA	NA	NA	NA	< 2
1,1-Dichloroethane	NA	NA	NA	NA	< 2
1,1-Dichloroethene	NA	NA	NA	NA	< 2
1,2-Dichloroethane	NA	NA	NA	NA	< 2
1,2-Dichloroethylenes (cis and trans isomers)	NA	NA	NA	NA	< 2
1,2-Dichloropropane	NA	NA	NA	NA	< 2
2-Butanone	NA	NA	NA	NA	< 10
2-Chloroethyl vinyl ether	NA	NA	NA	NA	< 10
2-Hexanone	NA	NA	NA	NA	< 10
Acetone	NA	NA	NA	NA	< 10
Benzene	NA	NA	NA	NA	< 2
Bromodichloromethane	NA	NA	NA	NA	< 2
Bromoform	NA	NA	NA	NA	< 2
Bromomethane	NA	NA	NA	NA	< 2
Carbon disulfide	NA	NA	NA	NA	< 10
Carbon tetrachloride	NA	NA	NA	NA	< 2
Chlorobenzene	NA	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SW002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	NA	NA	NA	NA	< 10
Chloroform	NA	NA	NA	NA	< 2
Chloromethane	NA	NA	NA	NA	< 2
Dibromochloromethane	NA	NA	NA	NA	< 2
Ethylbenzene	NA	NA	NA	NA	< 2
Methyl isobutyl ketone	NA	NA	NA	NA	< 10
Methylene chloride	NA	NA	NA	NA	< 10
Styrene	NA	NA	NA	NA	< 2
Tetrachloroethene	NA	NA	NA	NA	< 2
Toluene	NA	NA	NA	NA	< 2
Trichloroethene	NA	NA	NA	NA	< 2
Vinyl acetate	NA	NA	NA	NA	< 10
Vinyl chloride	NA	NA	NA	NA	< 2
Xylenes, total combined	NA	NA	NA	NA	< 10
cis-1,3-Dichloropropene	NA	NA	NA	NA	< 2
trans-1,3-Dichloropropene	NA	NA	NA	NA	< 2
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	NA	NA	NA	NA	< 2
1,2-Dichlorobenzene	NA	NA	NA	NA	< 2
1,3-Dichlorobenzene	NA	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SH002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
Semivolatiles Organic Compounds					
1,4-Dichlorobenzene	NA	NA	NA	NA	< 2
2,4,5-Trichlorophenol	NA	NA	NA	NA	< 2
2,4,6-Trichlorophenol	NA	NA	NA	NA	< 2
2,4-Dichlorophenol	NA	NA	NA	NA	< 2
2,4-Dichlorophenylacetic acid / DCAA	NA	NA	NA	NA	1.01
2,4-Dimethylphenol	NA	NA	NA	NA	< 2
2,4-Dinitrophenol	NA	NA	NA	NA	< 30
2,4-Dinitrotoluene	NA	NA	NA	NA	< 2
2,6-Dinitrotoluene	NA	NA	NA	NA	< 2
2-Chloronaphthalene	NA	NA	NA	NA	< 2
2-Chlorophenol	NA	NA	NA	NA	< 2
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	NA	NA	NA	< 20
2-Methylnaphthalene	NA	NA	NA	NA	< 2
2-Methylphenol / o-Cresol	NA	NA	NA	NA	< 2
2-Nitroaniline	NA	NA	NA	NA	< 10
2-Nitrophenol	NA	NA	NA	NA	< 2
3,3'-Dichlorobenzidine	NA	NA	NA	NA	< 10
3-Nitroaniline	NA	NA	NA	NA	< 10
4-Bromophenylphenyl ether	NA	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SH002	SM024SB002	SM024SS010	SM25CS8004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/19/94
Analytes					
Semivolatile Organic Compounds					
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	NA	NA	NA	< 2
4-Chloroaniline	NA	NA	NA	NA	< 2
4-Chlorophenylphenyl ether	NA	NA	NA	NA	< 2
4-Methylphenol / p-Cresol	NA	NA	NA	NA	< 2
4-Nitroaniline	NA	NA	NA	NA	< 10
4-Nitrophenol	NA	NA	NA	NA	< 20
Acenaphthene	NA	NA	NA	NA	< 2
Acenaphthylene	NA	NA	NA	NA	< 2
Anthracene	NA	NA	NA	NA	< 2
Benzo[a]anthracene	NA	NA	NA	NA	< 2
Benzo[a]pyrene	NA	NA	NA	NA	< 2
Benzo[b]fluoranthene	NA	NA	NA	NA	< 2
Benzo[def]phenanthrene	NA	NA	NA	NA	< 2
Benzo[g,h,i]perylene	NA	NA	NA	NA	< 2
Benzo[k]fluoranthene	NA	NA	NA	NA	< 2
Benzoic acid	NA	NA	NA	NA	< 20
Benzyl alcohol	NA	NA	NA	NA	< 2
Butylbenzyl phthalate	NA	NA	NA	NA	< 2
Carbazole	NA	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SW002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
Semivolatiles Organic Compounds					
Chrysene	NA	NA	NA	NA	< 2
Di-N-butyl phthalate	NA	NA	NA	NA	< 2
Di-N-octyl phthalate	NA	NA	NA	NA	< 2
Dibenz[ah]anthracene	NA	NA	NA	NA	< 2
Dibenzofuran	NA	NA	NA	NA	< 2
Diethyl phthalate	NA	NA	NA	NA	< 2
Dimethyl phthalate	NA	NA	NA	NA	< 2
Fluoranthene	NA	NA	NA	NA	< 2
Fluorene	NA	NA	NA	NA	< 2
Hexachloro-1,3-butadiene	NA	NA	NA	NA	< 2
Hexachlorobenzene	NA	NA	NA	NA	< 2
Hexachlorocyclopentadiene	NA	NA	NA	NA	< 10
Hexachloroethane	NA	NA	NA	NA	< 2
Indeno[1,2,3-c,d]pyrene	NA	NA	NA	NA	< 2
Isophorone	NA	NA	NA	NA	< 2
N-Nitrosodi-N-propylamine	NA	NA	NA	NA	< 2
N-Nitrosodiphenylamine	NA	NA	NA	NA	< 2
Naphthalene	NA	NA	NA	NA	< 2
Nitrobenzene	NA	NA	NA	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1



Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SM002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
-----					
Semivolatile Organic Compounds					
Pentachlorophenol	NA	NA	NA	NA	< 10
Phenanthrene	NA	NA	NA	NA	< 2
Phenol	NA	NA	NA	NA	< 2
Phosphoric acid triphenyl ester	NA	NA	NA	NA	8.01 /IM
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	< 2
bis(2-Chloroethyl)ether	NA	NA	NA	NA	< 2
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	< 2
bis(2-Ethylhexyl)phthalate	NA	NA	NA	NA	51
Pesticides/PCBs					
2,2-bis(p-Chlorophenyl)-1,1-trichloroethane	NA	NA	NA	NA	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	NA	NA	NA	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	NA	NA	NA	< .007
Aldrin	NA	NA	NA	NA	< .005
Dieldrin	NA	NA	NA	NA	< .005
Dimethoate	NA	NA	NA	NA	< .25 /IM
Endosulfan sulfate	NA	NA	NA	NA	< .005
Endrin	NA	NA	NA	NA	< .005
Endrin aldehyde	NA	NA	NA	NA	< .02
Endrin ketone	NA	NA	NA	NA	< .006
Heptachlor	NA	NA	NA	NA	< .005

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: Sample Date:	SM023SS005 12/8/93	SM023SW002 2/17/94	SM024SB002 2/19/94	SM024SS010 2/19/94	SM25CSB004 2/9/94
Analytes					
Pesticides/PCBs					
Heptachlor epoxide	NA	NA	NA	NA	< .005
Lindane	NA	NA	NA	NA	< .005
Methoxychlor	NA	NA	NA	NA	< .009
PCB 1016	NA	NA	NA	NA	< .13
PCB 1221	NA	NA	NA	NA	< .13
PCB 1232	NA	NA	NA	NA	< .13
PCB 1242	NA	NA	NA	NA	< .13
PCB 1248	NA	NA	NA	NA	< .13
PCB 1254	NA	NA	NA	NA	< .13
PCB 1260	NA	NA	NA	NA	< .13
Toxaphene	NA	NA	NA	NA	< .6
alpha-Benzenehexachloride	NA	NA	NA	NA	< .005
alpha-Chlordane	NA	NA	NA	NA	< .005
alpha-Endosulfan	NA	NA	NA	NA	< .005
beta-Benzenehexachloride	NA	NA	NA	NA	< .005
beta-Endosulfan	NA	NA	NA	NA	< .005
delta-Benzenehexachloride	NA	NA	NA	NA	< .005
gamma-Chlordane	NA	NA	NA	NA	< .005
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	NA	NA	NA	< .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SW002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/19/94
Analytes					
Herbicides					
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	NA	NA	NA	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	NA	NA	NA	NA	< .1
2,4-Dinitro-6-sec-butylphenol / Dinoseb	NA	NA	NA	NA	< .1
2-(2,4-Dichlorophenoxy)propionic acid	NA	NA	NA	NA	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	NA	NA	NA	NA	< .1
245TP / Silvex	NA	NA	NA	NA	< .1
Dalapon / alpha,alpha-Dichloropropionic acid	NA	NA	NA	NA	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	NA	NA	NA	NA	< 3
Mecoprop	NA	NA	NA	NA	< 3
Metals					
Aluminum	< 40	< 40	< 40	< 40	< 40
Aluminum (Filtered)	NA	< 40 F	NA	NA	NA
Antimony	< 3.05	< 3	< 3	< 3	< 3
Antimony (Filtered)	NA	10 F	NA	NA	NA
Arsenic	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Arsenic (Filtered)	NA	< 2.5 F	NA	NA	NA
Barium	< 25	< 25	< 25	< 25	< 25
Barium (Filtered)	NA	< 25 F	NA	NA	NA
Beryllium	< 5	< 5	< 5	< 5	< 5
Beryllium (Filtered)	NA	< 5 F	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SM002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
<b>Analytes</b>					
<b>Metals</b>					
Boron	NA	NA	NA	NA	< 50 /1
Cadmium	< 5	< 5	< 5	< 5	< 5
Cadmium (Filtered)	NA	< 5 F	NA	NA	NA
Calcium	150	< 100	< 100	< 100	< 100
Calcium (Filtered)	NA	132 F	NA	NA	NA
Chromium	< 10	< 10	< 10	< 10	< 10
Chromium (Filtered)	NA	< 10 F	NA	NA	NA
Cobalt	< 20	< 20	< 20	< 20	< 20
Cobalt (Filtered)	NA	< 20 F	NA	NA	NA
Copper	< 5	< 5	< 5	< 5	< 5
Copper (Filtered)	NA	< 5 F	NA	NA	NA
Cyanide	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Iron	< 45	< 45	< 45	< 45	< 45
Iron (Filtered)	NA	85.2 F	NA	NA	NA
Lead	< 2	4.2	< 2	5.1	< 2
Lead (Filtered)	NA	< 2 F	NA	NA	NA
Magnesium	< 50 /1	< 50	< 50	< 50	< 50
Magnesium (Filtered)	NA	< 50 F	NA	NA	NA
Manganese	< 5	< 5	< 5	< 5	< 5

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SH002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
-----					
Metals					
Manganese (Filtered)	NA	< 5	NA	NA	NA
Mercury	< .2	< .2	< .2	< .2	< .2
Mercury (Filtered)	NA	< .2	NA	NA	NA
Nickel	< 15	< 15	< 15	< 15	< 15
Nickel (Filtered)	NA	< 15	NA	NA	NA
Potassium	< 550	< 550	< 550	< 550	< 550
Potassium (Filtered)	NA	< 550	NA	NA	NA
Selenium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Selenium (Filtered)	NA	< 2.5	NA	NA	NA
Silver	< 5	< 5	< 5	< 5	< 5
Silver (Filtered)	NA	< 5	NA	NA	NA
Sodium	110 /1	< 100 /1	119	< 100	< 100 /1
Sodium (Filtered)	NA	138 F/1	NA	NA	NA
Thallium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Thallium (Filtered)	NA	< 2.5	NA	NA	NA
Vanadium	< 10	< 10	< 10	< 10	NA
Vanadium (Filtered)	NA	< 10	NA	NA	NA
Zinc	< 20	< 20	< 20	< 20	< 20
Zinc (Filtered)	NA	< 20	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name:	SM023SS005	SM023SW002	SM024SB002	SM024SS010	SM25CSB004
Sample Date:	12/8/93	2/17/94	2/19/94	2/19/94	2/9/94
Analytes					
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	6000
Ammonia	NA	NA	NA	NA	< 50
Chloride	NA	NA	NA	NA	< 500
Fluoride	NA	NA	NA	NA	< 500
Nitrite, nitrate-non specific	NA	NA	NA	NA	< 20
Sulfate	NA	NA	NA	NA	< 5000
Total dissolved solids	NA	NA	NA	NA	< 10000 D
Total organic carbon	NA	NA	NA	NA	< 1000
Total recoverable phenolics	NA	NA	NA	NA	< 2
Others					
Total hardness	NA	NA	NA	NA	< 1000

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes		
-----		
Volatile Organic Compounds		
1,1,1-Trichloroethane	NA	NA
1,1,2,2-Tetrachloroethane	NA	NA
1,1,2-Trichloroethane	NA	NA
1,1-Dichloroethane	NA	NA
1,1-Dichloroethene	NA	NA
1,2-Dichloroethane	NA	NA
1,2-Dichloroethylenes (cis and trans isomers)	NA	NA
1,2-Dichloropropane	NA	NA
2-Butanone	NA	NA
2-Chloroethyl vinyl ether	NA	NA
2-Hexanone	NA	NA
Acetone	NA	NA
Benzene	NA	NA
Bromodichloromethane	NA	NA
Bromoform	NA	NA
Bromomethane	NA	NA
Carbon disulfide	NA	NA
Carbon tetrachloride	NA	NA
Chlorobenzene	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes		
-----		
Volatile Organic Compounds		
Chloroethane	NA	NA
Chloroform	NA	NA
Chloromethane	NA	NA
Dibromochloromethane	NA	NA
Ethylbenzene	NA	NA
Methyl isobutyl ketone	NA	NA
Methylene chloride	NA	NA
Styrene	NA	NA
Tetrachloroethene	NA	NA
Toluene	NA	NA
Trichloroethene	NA	NA
Vinyl acetate	NA	NA
Vinyl chloride	NA	NA
Xylenes, total combined	NA	NA
cis-1,3-Dichloropropene	NA	NA
trans-1,3-Dichloropropene	NA	NA
Semivolatile Organic Compounds		
1,2,4-Trichlorobenzene	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes		
Semivolatile Organic Compounds		
1,4-Dichlorobenzene	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2
2,4,6-Trichlorophenol	< 2	< 2
2,4-Dichlorophenol	< 2	< 2
2,4-Dichlorophenylacetic acid / DCAA	.777	.801
2,4-Dimethylphenol	< 2	< 2
2,4-Dinitrophenol	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2
2-Chloronaphthalene	< 2	< 2
2-Chlorophenol	< 2	< 2
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	< 20	< 20
2-Methylnaphthalene	< 2	< 2
2-Methylphenol / o-Cresol	< 2	< 2
2-Nitroaniline	< 10	< 10
2-Nitrophenol	< 2	< 2
3,3'-Dichlorobenzidine	< 10	< 10
3-Nitroaniline	< 10	< 10
4-Bromophenylphenyl ether	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes

Semivolatile Organic Compounds

4-Chloro-3-cresol / 3-Methyl-4-chlorophenol

4-Chloroaniline

4-Chlorophenylphenyl ether

4-Methylphenol / p-Cresol

4-Nitroaniline

4-Nitrophenol

Acenaphthene

Acenaphthylene

Anthracene

Benzo[a]anthracene

Benzo[a]pyrene

Benzo[b]fluoranthene

Benzo[def]phenanthrene

Benzo[g,h,i]perylene

Benzo[k]fluoranthene

Benzoic acid

Benzyl alcohol

Butylbenzyl phthalate

Carbazole

< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2
< 10	< 10
< 20	< 20
< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2
< 20	< 20
< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2
< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes		
-----		
Semivolatiles Organic Compounds		
Chrysene	< 2	< 2
Di-N-butyl phthalate	< 2	< 2
Di-N-octyl phthalate	< 2	< 2
Dibenz[ah]anthracene	< 2	< 2
Dibenzofuran	< 2	< 2
Diethyl phthalate	< 2	< 2
Dimethyl phthalate	< 2	< 2
Fluoranthene	< 2	< 2
Fluorene	< 2	< 2
Hexachloro-1,3-butadiene	< 2	< 2
Hexachlorobenzene	< 2	< 2
Hexachlorocyclopentadiene	< 10	< 10
Hexachloroethane	< 2	< 2
Indeno[1,2,3-c,d]pyrene	< 2	< 2
Isophorone	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2
Naphthalene	< 2	< 2
Nitrobenzene	< 2	< 2

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Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes

Semivolatiles Organic Compounds

Pentachlorophenol	< 10	< 10
Phenanthrene	< 2	< 2
Phenol	< 2	< 2
Phosphoric acid triphenyl ester	7.73	2.07
bis(2-Chloroethoxy)methane	< 2	< 2
bis(2-Chloroethyl)ether	< 2	< 2
bis(2-Chloroisopropyl)ether	< 2	< 2
bis(2-Ethylhexyl)phthalate	2.7 B	< 2

Pesticides/PCBs

2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	< .007	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	< .005	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	< .007	< .007
Aldrin	< .005	< .005
Dieldrin	< .005	< .005
Dimethoate	< .25	< .25
Endosulfan sulfate	< .005	< .005
Endrin	< .005	< .005
Endrin aldehyde	< .02	< .02
Endrin ketone	< .006	< .006
Heptachlor	< .005	< .005

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes

Pesticides/PCBs

Heptachlor epoxide < .005 < .005  
Lindane < .005 < .005  
Methoxychlor < .009 < .009  
PCB 1016 < .13 < .13  
PCB 1221 < .13 < .13

PCB 1232 < .13 < .13  
PCB 1242 < .13 < .13  
PCB 1248 < .13 < .13  
PCB 1254 < .13 < .13  
PCB 1260 < .13 < .13

Toxaphene

alpha-Benzenehexachloride < .6 < .6  
alpha-Chlordane < .005 < .005  
alpha-Endosulfan < .005 < .005  
beta-Benzenehexachloride < .005 < .005

beta-Endosulfan

delta-Benzenehexachloride < .005 < .005  
gamma-Chlordane < .005 < .005

Herbicides

(2,4,5-Trichlorophenoxy)acetic acid / 245T < .1 < .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes

Herbicides

2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	< .1	< .1
2,4-Dinitro-6-sec-butylphenol / Dinoseb	< .1	< .1
2-(2,4-Dichlorophenoxy)propionic acid	< .1	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	< .1	< .1

245TP / Silvex

245TP / Silvex	< .1	< .1
Dalapon / alpha, alpha-Dichloropropionic acid	< .1	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	< 3	< 3
Mecoprop	< 3	< 3

Metals

Aluminum	< 40	48.7
Aluminum (Filtered)	NA	NA
Antimony	< 3	< 3
Antimony (Filtered)	NA	NA
Arsenic	< 2.5	< 2.5

Arsenic (Filtered)

Arsenic (Filtered)	NA	NA
Barium	< 25	< 25
Barium (Filtered)	NA	NA
Beryllium	< 5	< 5
Beryllium (Filtered)	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6B:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes	
-----	
Metals	
Boron	< 50
Cadmium	< 5
Cadmium (Filtered)	NA
Calcium	< 100
Calcium (Filtered)	NA
Chromium	< 10
Chromium (Filtered)	NA
Cobalt	< 20
Cobalt (Filtered)	NA
Copper	< 5
Copper (Filtered)	NA
Cyanide	< 2.5
Iron	< 45
Iron (Filtered)	NA
Lead	< 2
Lead (Filtered)	NA
Magnesium	< 50
Magnesium (Filtered)	NA
Manganese	< 5

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes

Metals

Manganese (Filtered)	NA	NA
Mercury	< .2	< .2
Mercury (Filtered)	NA	NA
Nickel	< 15	< 15
Nickel (Filtered)	NA	NA
Potassium	< 550	< 550
Potassium (Filtered)	NA	NA
Selenium	< 2.5	< 2.5
Selenium (Filtered)	NA	NA
Silver	< 5	< 5
Silver (Filtered)	NA	NA
Sodium	< 100	3920
Sodium (Filtered)	NA	NA
Thallium	< 2.5	< 2.5
Thallium (Filtered)	NA	NA
Vanadium	NA	482 D
Vanadium (Filtered)	NA	NA
Zinc	< 20	481 D
Zinc (Filtered)	NA	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D68:  
Summary of Rinse Blank Samples Analytical Results  
for Sites SM18 through SM25J

Sample Name: SM25HSS005 SM25JSS001  
Sample Date: 2/6/94 2/7/94

Analytes

Landfill Parameters

Alkalinity	46000	D	< 5000
Ammonia	< 50		< 50
Chloride	< 500		< 500
Fluoride	< 500		< 500
Nitrite, nitrate-non specific	< 20		< 20

Sulfate	< 5000		< 5000
Total dissolved solids	< 10000		< 10000
Total organic carbon	< 1000		< 1000
Total recoverable phenolics	< 2		51.8

Others

Total hardness	< 1000		< 1000
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Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	56	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	53	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	3	2.9	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	55	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSB002	SMBKGSB003	SMBKGSB004	SMBKGSB006	SMBKGSB007
Sample Date:	11/20/93	12/2/93	11/22/93	11/19/93	2/8/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	< 10	< 10	< 10	< 10	< 10
Chloroform	3.9	< 2	18	19	2.6
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone					
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	51	< 2	< 2	< 2	< 2
Trichloroethene					
Vinyl acetate	57	< 2	< 2	< 2	< 2
Vinyl chloride	< 10	< 10	< 10	< 10	< 10
Xylenes, total combined	< 2	< 2	< 2	< 2	< 2
cis-1,3-Dichloropropene	< 10	< 10	< 10	< 10	< 10
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSB002	SMBKGSB003	SMBKGSB004	SMBKGSB006	SMBKGSB007
Sample Date:	11/20/93	12/2/93	11/22/93	11/19/93	2/8/94
Analytes					
Semivolatiles Organic Compounds					
1,4-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4,6-Trichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4-Dichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4-Dichlorophenylacetic acid / DCAA	.921	1.29	.819	.827	1.21
2,4-Dimethylphenol	< 2	< 2	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2	< 2	< 2
2-Cyclohexen-1-one	NA	NA	NA	NA	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	< 20	< 20	< 20	< 20	< 20
2-Methylnaphthalene	< 2	< 2	< 2	< 2	< 2
2-Methylphenol / o-Cresol	< 2	< 2	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10	< 10	< 10
2-Nitrophenol	< 2	< 2	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10	< 10	< 10	< 10	< 10
3-Nitroaniline	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSB002	SMBKGSB003	SMBKGSB004	SMBKGSB006	SMBKGSB007
Sample Date:	11/20/93	12/2/93	11/22/93	11/19/93	2/8/94
Analytes					
-----					
Semivolatile Organic Compounds					
4-Bromophenylphenyl ether	< 2	< 2	< 2	< 2	< 2
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	< 2	< 2	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2	< 2	< 2
4-Methylphenol / p-Cresol	< 2	< 2	< 2	< 2	< 2
4-Nitroaniline	< 10	< 10	< 10	< 10	< 10
4-Nitrophenol	< 20	< 20	< 20	< 20	< 20
Acenaphthene	< 2	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2	< 2	< 2
Benzo[a]anthracene	< 2	< 2	< 2	< 2	< 2
Benzo[a]pyrene	< 2	< 2	< 2	< 2	< 2
Benzo[b]fluoranthene	< 2	< 2	< 2	< 2	< 2
Benzo[def]phenanthrene	< 2	NA	< 2	< 2	< 2
Benzo[g,h,i]perylene	< 2	< 2	< 2	< 2	< 2
Benzo[k]fluoranthene	< 2	< 2	< 2	< 2	< 2
Benzoic acid	< 20	< 20	< 20	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2	< 2	< 2
Butylbenzyl phthalate	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Semivolatiles Organic Compounds					
Carbazole	< 2	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2	< 2
Di-N-butyl phthalate	< 2	< 2	< 2	< 2	< 2
Di-N-octyl phthalate	< 2	< 2	< 2	< 2	< 2
Dibenz[ah]anthracene	< 2	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2	< 2
Diethyl phthalate	< 2	< 2	< 2	< 2	< 2
Dimethyl phthalate	< 2	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2	< 2	< 2
Hexachloro-1,3-butadiene	< 2	< 2	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	< 2	< 2	< 2	< 2	< 2
Indeno[1,2,3-c,d]pyrene	< 2	< 2	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	< 2	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2	< 2	< 2	< 2
Naphthalene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Semivolatile Organic Compounds					
Nitrobenzene	< 2	< 2	< 2	< 2	< 2
Pentachlorophenol	< 10	NA	< 10	< 10	< 10
Phenanthrene	< 2	NA	< 2	< 2	< 2
Phenol	< 2	NA	< 2	< 2	< 2
Phosphoric acid triphenyl ester	7.86	7	7.71	7.77	7.35 /IM
bis(2-Chloroethoxy)methane	< 2	< 2	< 2	< 2	< 2
bis(2-Chloroethyl)ether	< 2	< 2	< 2	< 2	< 2
bis(2-Chloroisopropyl)ether	< 2	< 2	< 2	< 2	< 2
bis(2-Ethylhexyl)phthalate	< 2	< 2	< 2	< 2	< 2
Pesticides/PCBs					
2,2-bis(p-chlorophenyl)-1,1,1-trichloroethane	< .007	< .007	< .007	< .007	< .007
2,2-bis(p-chlorophenyl)-1,1-dichloroethane	< .005	< .005	< .005	< .005	< .005
2,2-bis(p-chlorophenyl)-1,1-dichloroethene	< .007	< .007	< .007	< .007	< .007
Aldrin	< .005	< .005	< .005	< .005	< .005
Dieldrin	< .005	< .005	< .005	< .005	< .005
Dimethoate	< .25	< .25	< .25	< .25	< .25 /IM
Endosulfan sulfate	< .005	< .005	< .005	< .005	< .005
Endrin	< .005	< .005 /1	< .005	< .005	< .005
Endrin aldehyde	< .02	< .02	< .02	< .02	< .02
Endrin ketone	< .006	< .006	< .006	< .006	< .006

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Pesticides/PCBs					
Heptachlor	< .005	< .005	< .005	< .005	< .005
Heptachlor epoxide	< .005	< .005	< .005	< .005	< .005
Lindane	< .005	< .005	< .005	< .005	< .005
Methoxychlor	< .009	< .009 /1	< .009	< .009	< .009
PCB 1016	< .13	< .13	< .13	< .13	< .13
PCB 1221	< .13	< .13	< .13	< .13	< .13
PCB 1232	< .13	< .13	< .13	< .13	< .13
PCB 1242	< .13	< .13	< .13	< .13	< .13
PCB 1248	< .13	< .13	< .13	< .13	< .13
PCB 1254	< .13	< .13	< .13	< .13	< .13
PCB 1260	< .13	< .13	< .13	< .13	< .13
Toxaphene	< .6	< .6	< .6	< .6	< .6
alpha-Benzenehexachloride	< .005	< .005	< .005	< .005	< .005
alpha-Chlordane	< .005	< .005	< .005	< .005	< .005
alpha-Endosulfan	< .005	< .005	< .005	< .005	< .005
beta-Benzenehexachloride	< .005	< .005	< .005	< .005	< .005
beta-Endosulfan	< .005	< .005	< .005	< .005	< .005
delta-Benzenehexachloride	< .005	< .005	< .005	< .005	< .005
gamma-Chlordane	< .005	< .005	< .005	< .005	< .005

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	< .1	< .1	< .1	< .1	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1	< .1	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	< .1	< .1	< .1	< .1	< .1
2,4-Dinitro-6-sec-butylphenol / Dinoseb	< .1	< .1	< .1	< .1	< .1
2-(2,4-Dichlorophenoxy)propionic acid	< .1	< .1	< .1	< .1	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	< .1	< .1	< .1	< .1	< .1
245TP / Silvex	< .1	< .1	< .1	< .1	< .1
Dalapon / alpha,alpha-Dichloropropionic acid	< .1	< .1	< .1	< .1	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	< 3	< 3	< 3	< 3	< 3
Mecoprop	< 3	< 3	< 3	< 3	< 3
Metals					
Aluminum	< 40	< 40	< 40	< 40	< 40
Aluminum (Filtered)	NA	NA	NA	NA	NA
Antimony	< 3.05	< 3.05	< 3.05	< 3.05	< 3
Antimony (Filtered)	NA	NA	NA	NA	NA
Arsenic	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Arsenic (Filtered)	NA	NA	NA	NA	NA
Barium	< 25	< 25	< 25	< 25	< 25
Barium (Filtered)	NA	NA	NA	NA	NA
Beryllium	< 5	< 5	< 5	48.5	< 5

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Metals					
Beryllium (Filtered)	NA	NA	NA	NA	NA
Boron	< 50	< 50	< 50	56.2	< 50 /1
Cadmium	< 5	< 5	< 5	< 5	< 5
Cadmium (Filtered)	NA	NA	NA	NA	NA
Calcium	205	321	< 100	139	< 100
Calcium (Filtered)	NA	NA	NA	NA	NA
Chromium	< 10	< 10	< 10	< 10	< 10
Chromium (Filtered)	NA	NA	NA	NA	NA
Cobalt	< 20	< 20	< 20	473	< 20
Cobalt (Filtered)	NA	NA	NA	NA	NA
Copper	< 5	< 5	< 5	233	< 5
Copper (Filtered)	NA	NA	NA	NA	NA
Cyanide	52.5	< 2.5	< 2.5	< 2.5	< 2.5
Iron	< 45	105	< 45	< 45	< 45
Iron (Filtered)	NA	NA	NA	NA	NA
Lead	< 2	< 2	< 2	< 2	< 2
Lead (Filtered)	NA	NA	NA	NA	NA
Magnesium	< 50	< 50	< 50	< 50	< 50
Magnesium (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSB002 11/20/93	SMBKGSB003 12/2/93	SMBKGSB004 11/22/93	SMBKGSB006 11/19/93	SMBKGSB007 2/8/94
Analytes					
Metals					
Manganese	< 5	< 5	< 5	477 D	< 5
Manganese (Filtered)	NA	NA	NA	NA	NA
Mercury	< .2	< .2	< .2	< .2	< .2
Mercury (Filtered)	NA	NA	NA	NA	NA
Nickel	< 15	< 15	< 15	483 D	< 15
Nickel (Filtered)	NA	NA	NA	NA	NA
Potassium	< 550	< 550	< 550	9540 D	< 550
Potassium (Filtered)	NA	NA	NA	NA	NA
Selenium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Selenium (Filtered)	NA	NA	NA	NA	NA
Silver	< 5	< 5	< 5	< 5	< 5
Silver (Filtered)	NA	NA	NA	NA	NA
Sodium	159	156	259	246	< 100 /I
Sodium (Filtered)	NA	NA	NA	NA	NA
Thallium	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Thallium (Filtered)	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	483 D	NA
Vanadium (Filtered)	NA	NA	NA	NA	NA
Zinc	< 20	25	< 20	493 D	< 20

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSB002	SMBKGSB003	SMBKGSB004	SMBKGSB006	SMBKGSB007
Sample Date:	11/20/93	12/2/93	11/22/93	11/19/93	2/8/94
Analytes	NA	NA	NA	NA	NA
Metals					
Zinc (Filtered)	NA	NA	NA	NA	NA
Landfill Parameters					
Alkalinity	51000	45000	< 5000	5000	6000
Ammonia	< 50	< 50	< 50	< 50	< 50
Chloride	< 500	< 500	< 500	< 500	< 500
Fluoride	< 500	< 500	< 500	< 500	< 500
Nitrite, nitrate-non specific	< 20	< 20	< 20	< 20	< 20
Sulfate	< 5000	< 5000	< 5000	< 5000	< 5000
Total dissolved solids	< 10000	< 10000 D	< 10000	< 10000	< 10000
Total organic carbon	< 1000	< 1000	< 1000	< 1000	< 1000
Total recoverable phenolics	< 2	< 2	< 2	< 2	< 2
Others					
Total hardness	39000	< 1000	< 1000	< 1000	< 1000

Note: Results are reported in micrograms per liter (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	NA	< 2	NA	NA
1,1,2,2-Tetrachloroethane	< 2	NA	< 2	NA	NA
1,1,2-Trichloroethane	< 2	NA	< 2	NA	NA
1,1-Dichloroethane	< 2	NA	< 2	NA	NA
1,1-Dichloroethene	< 2	NA	56	NA	NA
1,2-Dichloroethane	< 2	NA	< 2	NA	NA
1,2-Dichloroethylenes (cis and trans isomers)	< 2	NA	< 2	NA	NA
1,2-Dichloropropane	< 2	NA	< 2	NA	NA
2-Butanone	< 10	NA	< 10	NA	NA
2-Chloroethyl vinyl ether	< 10	NA	< 10	NA	NA
2-Hexanone	< 10	NA	< 10	NA	NA
Acetone	< 10	NA	< 10	NA	NA
Benzene	< 2	NA	52	NA	NA
Bromodichloromethane	< 2	NA	< 2	NA	NA
Bromoform	< 2	NA	< 2	NA	NA
Bromomethane	< 2	NA	< 2	NA	NA
Carbon disulfide	< 10	NA	< 10	NA	NA
Carbon tetrachloride	< 2	NA	< 2	NA	NA
Chlorobenzene	< 2	NA	57	NA	NA

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6c.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSE010	SMBKGSE014	SMBKGSE017	SMBKGSS004	SMBKGSS018
Sample Date:	3/10/94	3/10/94	2/24/94	11/23/93	11/29/93
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	< 10	NA	< 10	NA	NA
Chloroform	< 2	NA	< 2	NA	NA
Chloromethane	< 2	NA	< 2	NA	NA
Dibromochloromethane	< 2	NA	< 2	NA	NA
Ethylbenzene	< 2	NA	< 2	NA	NA
Methyl isobutyl ketone	< 10	NA	< 10	NA	NA
Methylene chloride	< 10	NA	< 10	NA	NA
Styrene	< 2	NA	< 2	NA	NA
Tetrachloroethene	< 2	NA	< 2	NA	NA
Toluene	< 2	NA	52	NA	NA
Trichloroethene	< 2	NA	55	NA	NA
Vinyl acetate	< 10	NA	< 10	NA	NA
Vinyl chloride	< 2	NA	< 2	NA	NA
Xylenes, total combined	< 10	NA	< 10	NA	NA
cis-1,3-Dichloropropene	< 2	NA	< 2	NA	NA
trans-1,3-Dichloropropene	< 2	NA	< 2	NA	NA
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< 2	NA	< 2	< 2	< 2
1,2-Dichlorobenzene	< 2	NA	< 2	< 2	< 2
1,3-Dichlorobenzene	< 2	NA	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSE010	SMBKGSE014	SMBKGSE017	SMBKGSS004	SMBKGSS018
Sample Date:	3/10/94	3/10/94	2/24/94	11/23/93	11/29/93
Analytes					
Semivolatile Organic Compounds					
1,4-Dichlorobenzene	< 2	NA	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	NA	< 2	< 2	< 2
2,4,6-Trichlorophenol	< 2	NA	< 2	< 2	< 2
2,4-Dichlorophenol	< 2	NA	< 2	< 2	< 2
2,4-Dichlorophenylacetic acid / DCAA	.77	NA	.948	.771	1.21
2,4-Dimethylphenol	< 2	NA	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	NA	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	NA	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	NA	< 2	< 2	< 2
2-Chloronaphthalene	< 2	NA	< 2	< 2	< 2
2-Chlorophenol	< 2	NA	< 2	< 2	< 2
2-Cyclohexen-1-one	NA	NA	NA	5	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	< 20	NA	< 20	< 20	< 20
2-Methylnaphthalene	< 2	NA	< 2	< 2	< 2
2-Methylphenol / o-Cresol	< 2	NA	< 2	< 2	< 2
2-Nitroaniline	< 10	NA	< 10	< 10	< 10
2-Nitrophenol	< 2	NA	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10	NA	< 10	< 10	< 10
3-Nitroaniline	< 10	NA	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
Semivolatiles Organic Compounds					
4-Bromophenylphenyl ether	< 2	NA	< 2	< 2	< 2
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	< 2	NA	< 2	< 2	< 2
4-Chloroaniline	< 2	NA	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	NA	< 2	< 2	< 2
4-Methylphenol / p-Cresol	< 2	NA	< 2	< 2	< 2
4-Nitroaniline	< 10	NA	< 10	< 10	< 10
4-Nitrophenol	< 20	NA	< 20	< 20	< 20
Acenaphthene	< 2	NA	< 2	< 2	< 2
Acenaphthylene	< 2	NA	< 2	< 2	< 2
Anthracene	< 2	NA	< 2	< 2	< 2
Benzo[a]anthracene	< 2	NA	< 2	< 2	< 2
Benzo[a]pyrene	< 2	NA	< 2	< 2	< 2
Benzo[b]fluoranthene	< 2	NA	< 2	< 2	< 2
Benzo[def]phenanthrene	< 2	NA	< 2	< 2	< 2
Benzo[g,h,i]perylene	< 2	NA	< 2	< 2	< 2
Benzo[k]fluoranthene	< 2	NA	< 2	< 2	< 2
Benzoic acid	< 20	NA	< 20	< 20	< 20
Benzyl alcohol	< 2	NA	< 2	< 2	< 2
Butylbenzyl phthalate	< 2	NA	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
Semivolatile Organic Compounds					
Carbazole	< 2	NA	< 2	< 2	< 2 R
Chrysene	< 2	NA	< 2	< 2	< 2
Di-N-butyl phthalate	< 2	NA	< 2	< 2	< 2
Di-N-octyl phthalate	2.6	NA	< 2	< 2	< 2
Dibenz[ah]anthracene	< 2	NA	< 2	< 2	< 2
Dibenzofuran	< 2	NA	< 2	< 2	< 2
Diethyl phthalate	< 2	NA	< 2	< 2	< 2
Dimethyl phthalate	< 2	NA	< 2	< 2	< 2
Fluoranthene	< 2	NA	< 2	< 2	< 2
Fluorene	< 2	NA	< 2	< 2	< 2
Hexachloro-1,3-butadiene	< 2	NA	< 2	< 2	< 2
Hexachlorobenzene	< 2	NA	< 2	< 2	< 2
Hexachlorocyclopentadiene	< 10	NA	< 10	< 10	< 10
Hexachloroethane	< 2	NA	< 2	< 2	< 2
Indeno[1,2,3-c,d]pyrene	< 2	NA	< 2	< 2	< 2
Isophorone	< 2	NA	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	NA	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	NA	< 2	< 2	< 2
Naphthalene	< 2	NA	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
Semivolatiles Organic Compounds					
Nitrobenzene	< 2	NA	< 2	< 2	< 2
Pentachlorophenol	< 10	NA	< 10	< 10	< 10
Phenanthrene	< 2	NA	< 2	< 2	< 2
Phenol	< 2	NA	< 2	< 2	< 2
Phosphoric acid triphenyl ester	6.77	NA	8.1 /1	8.32	7.38
bis(2-Chloroethoxy)methane	< 2	NA	< 2	< 2	< 2
bis(2-Chloroethyl)ether	< 2	NA	< 2	< 2	< 2
bis(2-Chloroisopropyl)ether	< 2	NA	< 2	< 2	< 2
bis(2-Ethylhexyl)phthalate	8	NA	2.3 B	< 2	< 2
Pesticides/PCBs					
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	< .007	< .007 /M	< .007	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	< .005	< .005	< .005	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	< .007	< .007	< .007	< .007
Aldrin	NA	< .005	< .005	< .005	< .005
Dieldrin	NA	< .005	< .005	< .005	< .005
Dimethoate	< .25	NA	< .25 /1	< .25	< .25
Endosulfan sulfate	NA	< .005	< .005	< .005	< .005
Endrin	NA	< .005	< .005	< .005	< .005
Endrin aldehyde	NA	< .02	< .02	< .02	< .02
Endrin ketone	NA	< .006	< .006	< .006	< .006

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
Pesticides/PCBs					
Heptachlor	NA	< .005	< .005	< .005	< .005
Heptachlor epoxide	NA	< .005	< .005	< .005	< .005
Lindane	NA	< .005	< .005	< .005	< .005
Methoxychlor	NA	< .009	< .009 /J	< .009	< .009
PCB 1016	NA	< .13	< .13	< .13	< .13
PCB 1221	NA	< .13	< .13	< .13	< .13
PCB 1232	NA	< .13	< .13	< .13	< .13
PCB 1242	NA	< .13	< .13	< .13	< .13
PCB 1248	NA	< .13	< .13	< .13	< .13
PCB 1254	NA	< .13	< .13	< .13	< .13
PCB 1260	NA	< .13	< .13	< .13	< .13
Toxaphene	NA	< .6	< .6	< .6	< .6
alpha-Benzenehexachloride	NA	< .005	< .005	< .005	< .005
alpha-Chlordane	NA	< .005	< .005	< .005	< .005
alpha-Endosulfan	NA	< .005	< .005	< .005	< .005
beta-Benzenehexachloride	NA	< .005	< .005	< .005	< .005
beta-Endosulfan	NA	< .005	< .005	< .005	< .005
delta-Benzenehexachloride	NA	< .005	< .005	< .005	< .005
gamma-Chlordane	NA	< .005	< .005	< .005	< .005

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
Herbicides					
(2,4,5-Trichlorophenoxy)acetic acid / 245T	< .1	NA	< .1	< .1	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	NA	< .1	< .1	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	< .1	NA	< .1	< .1 / J	< .1
2,4-Dinitro-6-sec-buty(phenol / Dinoseb	< .1	NA	< .1	< .1	< .1
2-(2,4-Dichlorophenoxy)propionic acid	< .1	NA	< .1	< .1	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	< .1	NA	< .1	< .1	< .1
245TP / Silvex	< .1	NA	< .1	< .1	< .1
Dalapon / alpha,alpha-Dichloropropionic acid	< .1	NA	< .1	< .1	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	< 3	NA	< 3	< 3	< 3
Mecoprop	< 3	NA	< 3	< 3	< 3
Metals					
Aluminum	< 40	NA	< 40	< 40	48.3
Aluminum (Filtered)	NA	NA	NA	NA	NA
Antimony	NA	< 3	< 3	< 3.05	< 3.05
Antimony (Filtered)	NA	NA	NA	NA	NA
Arsenic	NA	< 2.5	< 2.5	< 2.5	< 2.5
Arsenic (Filtered)	NA	NA	NA	NA	NA
Barium	< 25	NA	< 25	< 25	< 25
Barium (Filtered)	NA	NA	NA	NA	NA
Beryllium	< 5	NA	< 5	< 5	< 5

Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: Sample Date:	SMBKGSE010 3/10/94	SMBKGSE014 3/10/94	SMBKGSE017 2/24/94	SMBKGSS004 11/23/93	SMBKGSS018 11/29/93
Analytes					
Metals					
Beryllium (Filtered)	NA	NA	NA	NA	NA
Boron	NA	NA	NA	NA	NA
Cadmium	< 5	NA	< 5	< 5	< 5
Cadmium (Filtered)	NA	NA	NA	NA	NA
Calcium	< 100	NA	< 100	20400	20600
Calcium (Filtered)	NA	NA	NA	NA	NA
Chromium	< 10	NA	< 10	< 10	< 10
Chromium (Filtered)	NA	NA	NA	NA	NA
Cobalt	< 20	NA	< 20	< 20	< 20
Cobalt (Filtered)	NA	NA	NA	NA	NA
Copper	< 5	NA	< 5	40.3	41.4
Copper (Filtered)	NA	NA	NA	NA	NA
Cyanide	< 2.5	NA	< 2.5	< 2.5	< 2.5
Iron	< 45	NA	< 45	< 45	< 45
Iron (Filtered)	NA	NA	NA	NA	NA
Lead	< 2	NA	45.7	2.4	2.3
Lead (Filtered)	NA	NA	NA	NA	NA
Magnesium	< 50	NA	< 50	7480	7530
Magnesium (Filtered)	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/g)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSE010	SMBKGSE014	SMBKGSE017	SMBKGSS004	SMBKGSS018
Sample Date:	3/10/94	3/10/94	2/24/94	11/23/93	11/29/93
Analytes					
Metals					
Manganese	< 5	NA	< 5	< 5	< 5
Manganese (Filtered)	NA	NA	NA	NA	NA
Mercury	3.89	NA	< .2	< .2	< .2
Mercury (Filtered)	NA	NA	NA	NA	NA
Nickel	< 15	NA	< 15	< 15	< 15
Nickel (Filtered)	NA	NA	NA	NA	NA
Potassium	< 550	NA	< 550	609	858
Potassium (Filtered)	NA	NA	NA	NA	NA
Selenium	< 2.5 /J	NA	< 2.5	< 2.5	< 2.5
Selenium (Filtered)	NA	NA	NA	NA	NA
Silver	< 5	NA	< 5	< 5	< 5
Silver (Filtered)	NA	NA	NA	NA	NA
Sodium	125	NA	101	6580	6640
Sodium (Filtered)	NA	NA	NA	NA	NA
Thallium	< 2.5	NA	< 2.5	< 2.5	< 2.5
Thallium (Filtered)	NA	NA	NA	NA	NA
Vanadium	< 10	NA	< 10	NA	NA
Vanadium (Filtered)	NA	NA	NA	NA	NA
Zinc	< 20	NA	< 20	< 20	< 20

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name:	SMBKGSE010	SMBKGSE014	SMBKGSE017	SMBKGSS004	SMBKGSS018
Sample Date:	3/10/94	3/10/94	2/24/94	11/23/93	11/29/93
Analytes					
Metals					
Zinc (Filtered)	NA	NA	NA	NA	NA
Landfill Parameters					
Alkalinity	NA	NA	NA	NA	NA
Ammonia	NA	< 50	< 50	63.4	69.9
Chloride	NA	NA	NA	NA	NA
Fluoride	NA	NA	NA	NA	NA
Nitrite, nitrate-non specific	< 20	NA	< 20	196	208
Sulfate	NA	NA	NA	NA	NA
Total dissolved solids	NA	NA	NA	NA	NA
Total organic carbon	NA	NA	NA	NA	NA
Total recoverable phenolics	NA	NA	NA	NA	NA
Others					
Total hardness	NA	NA	NA	NA	NA

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
Volatile Organic Compounds	
1,1,1-Trichloroethane	< 2
1,1,2,2-Tetrachloroethane	< 2
1,1,2-Trichloroethane	< 2
1,1-Dichloroethane	< 2
1,1-Dichloroethene	< 2
1,2-Dichloroethane	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2
1,2-Dichloropropane	< 2
2-Butanone	< 10
2-Chloroethyl vinyl ether	< 10
2-Hexanone	< 10
Acetone	< 10
Benzene	< 2
Bromodichloromethane	< 2
Bromoform	< 2
Bromomethane	< 2
Carbon disulfide	< 10
Carbon tetrachloride	< 2
Chlorobenzene	< 2

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
-----	
Volatile Organic Compounds	
Chloroethane	< 10
Chloroform	< 2
Chloromethane	< 2
Dibromochloromethane	< 2
Ethylbenzene	< 2
Methyl isobutyl ketone	< 10
Methylene chloride	< 10
Styrene	< 2
Tetrachloroethene	< 2
Toluene	< 2
Trichloroethene	< 2
Vinyl acetate	< 10
Vinyl chloride	< 2
Xylenes, total combined	< 10
cis-1,3-Dichloropropene	< 2
trans-1,3-Dichloropropene	< 2
Semivolatile Organic Compounds	
1,2,4-Trichlorobenzene	< 2
1,2-Dichlorobenzene	< 2
1,3-Dichlorobenzene	< 2

-----  
Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
-----	
Semivolatiles Organic Compounds	
1,4-Dichlorobenzene	< 2
2,4,5-Trichlorophenol	< 2
2,4,6-Trichlorophenol	< 2
2,4-Dichlorophenol	< 2
2,4-Dichlorophenylacetic acid / DCAA	.958
2,4-Dimethylphenol	< 2
2,4-Dinitrophenol	< 30
2,4-Dinitrotoluene	< 2
2,6-Dinitrotoluene	< 2
2-Chloronaphthalene	< 2
2-Chlorophenol	< 2
2-Cyclohexen-1-one	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	< 20
2-Methylnaphthalene	< 2
2-Methylphenol / o-Cresol	< 2
2-Nitroaniline	< 10
2-Nitrophenol	< 2
3,3'-Dichlorobenzidine	< 10
3-Nitroaniline	< 10

-----  
Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
Semivolatile Organic Compounds	
4-Bromophenylphenyl ether	< 2
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	< 2
4-Chloroaniline	< 2
4-Chlorophenylphenyl ether	< 2
4-Methylphenol / p-Cresol	< 2
4-Nitroaniline	< 10
4-Nitrophenol	< 20
Acenaphthene	< 2
Acenaphthylene	< 2
Anthracene	< 2
Benzo[a]anthracene	< 2
Benzo[a]pyrene	< 2
Benzo[b]fluoranthene	< 2
Benzo[def]phenanthrene	< 2
Benzo[g,h,i]perylene	< 2
Benzo[k]fluoranthene	< 2
Benzoic acid	< 20
Benzyl alcohol	< 2
Butylbenzyl phthalate	< 2

Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
-----	
Semivolatile Organic Compounds	
Carbazole	< 2
Chrysene	< 2
Di-N-butyl phthalate	< 2
Di-N-octyl phthalate	< 2
Dibenz[ah]anthracene	< 2
Dibenzofuran	< 2
Diethyl phthalate	< 2
Dimethyl phthalate	< 2
Fluoranthene	< 2
Fluorene	< 2
Hexachloro-1,3-butadiene	< 2
Hexachlorobenzene	< 2
Hexachlorocyclopentadiene	< 10
Hexachloroethane	< 2
Indeno[1,2,3-c,d]pyrene	< 2
Isophorone	< 2
N-Nitrosodi-N-propylamine	< 2
N-Nitrosodiphenylamine	< 2
Naphthalene	< 2

-----  
Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
-----	
Semivolatile Organic Compounds	
Nitrobenzene	< 2
Pentachlorophenol	< 10
Phenanthrene	< 2
Phenol	< 2
Phosphoric acid triphenyl ester	8.01
bis(2-Chloroethoxy)methane	< 2
bis(2-Chloroethyl)ether	< 2
bis(2-Chloroisopropyl)ether	< 2
bis(2-Ethylhexyl)phthalate	2 JP
Pesticides/PCBs	
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	< .007
Aldrin	< .005
Dieldrin	< .005
Dimethoate	< .25
Endosulfan sulfate	< .005
Endrin	< .005
Endrin aldehyde	< .02
Endrin ketone	< .006

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Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
-----	
Pesticides/PCBs	
Heptachlor	< .005
Heptachlor epoxide	< .005
Lindane	< .005
Methoxychlor	< .009
PCB 1016	< .13
PCB 1221	< .13
PCB 1232	< .13
PCB 1242	< .13
PCB 1248	< .13
PCB 1254	< .13
PCB 1260	< .13
Toxaphene	< .6
alpha-Benzenhexachloride	< .005
alpha-Chlordane	< .005
alpha-Endosulfan	< .005
beta-Benzenhexachloride	< .005
beta-Endosulfan	< .005
delta-Benzenhexachloride	< .005
gamma-Chlordane	< .005

-----  
Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
-----	
Herbicides	
(2,4,5-Trichlorophenoxy)acetic acid / 245T	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	< .1
2,4-Dinitro-6-sec-buty(phenol / Dinoseb	< .1
2-(2,4-Dichlorophenoxy)propionic acid	< .1
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	< .1
245TP / Silvex	< .1
Dalapon / alpha,alpha-Dichloropropionic acid	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	< 3
Mecoprop	< 3
Metals	
Aluminum	< 40
Aluminum (Filtered)	2010 F
Antimony	< 3
Antimony (Filtered)	10.2 F
Arsenic	50.2
Arsenic (Filtered)	< 2.5 F
Barium	< 25
Barium (Filtered)	2040 F
Beryllium	< 5

-----  
Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes		
-----		
Metals		
Beryllium (Filtered)	51.7	F
Boron	NA	
Cadmium	< 5	
Cadmium (Filtered)	53	F
Calcium	< 100	
Calcium (Filtered)	< 100	F
Chromium	< 10	
Chromium (Filtered)	200	F
Cobalt	< 20	
Cobalt (Filtered)	< 20	F
Copper	< 5	
Copper (Filtered)	< 5	F
Cyanide	< 2.5	
Iron	< 45	
Iron (Filtered)	1020	F
Lead	< 2	
Lead (Filtered)	< 2	F
Magnesium	< 50	
Magnesium (Filtered)	10100	F

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

SMBKGSW001  
3/9/94

Sample Name:  
Sample Date:

Analytes

Metals

Manganese	< 5
Manganese (Filtered)	< 5 F
Mercury	< .2
Mercury (Filtered)	< .2 F
Nickel	< 15
Nickel (Filtered)	< 15 F
Potassium	< 550
Potassium (Filtered)	9920 F
Selenium	47 /J
Selenium (Filtered)	< 2.5 F/J
Silver	< 5
Silver (Filtered)	53.1 F
Sodium	< 100
Sodium (Filtered)	122 F
Thallium	< 2.5
Thallium (Filtered)	< 2.5 F
Vanadium	< 10
Vanadium (Filtered)	< 10 F
Zinc	< 20

Note: Results are reported in micrograms per liter (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D6C.  
Summary of Rinse Blank Samples Analytical Results  
for Background Sample Sites

Sample Name: SMBKGSW001  
Sample Date: 3/9/94

Analytes	
Metals	
Zinc (Filtered)	< 20 F
Landfill Parameters	
Alkalinity	NA
Ammonia	< 50
Chloride	NA
Fluoride	NA
Nitrite, nitrate-non specific	< 20
Sulfate	NA
Total dissolved solids	NA
Total organic carbon	NA
Total recoverable phenolics	NA
Others	
Total hardness	NA

Note: Results are reported in micrograms per liter (ug/g)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	E1001MW001	E1002MW003	E1002SB001	E1002SB06A	E1003MW004
Sample Date:	2/2/94	2/7/94	12/6/93	1/24/94	2/16/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
-----					
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
-----					
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	13	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2 R	< 2	< 2
-----					
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	E1001MW001	E1002MW003	E1002SB001	E1002SB06A	E1003MW004
Sample Date:	2/2/94	2/7/94	12/6/93	1/24/94	2/16/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	E1003SB001	E1004MW001	E1004MW002	E1004MW004	E1004SB002
Sample Date:	11/30/93	2/4/94	2/7/94	2/5/94	12/20/93
<b>Analytes</b>					
-----					
<b>Volatile Organic Compounds</b>					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2 R	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	E1003SB001	E1004MW001	E1004MW002	E1004MW004	E1004SB002
Sample Date:	11/30/93	2/4/94	2/7/94	2/5/94	12/20/93
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	MW13 2/2/94	MW16 1/26/94	MW17 1/29/94	MW18 1/28/94	MW19 1/27/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	MW13	MW16	MW17	MW18	MW19
Sample Date:	2/2/94	1/26/94	1/29/94	1/28/94	1/27/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data qualifiers are defined in Table C1



Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	MW20 1/31/94	MW21 1/31/94	MW22 1/27/94	MW23 1/28/94	MW24 1/30/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	MW20 1/31/94	MW21 1/31/94	MW22 1/27/94	MW23 1/28/94	MW24 1/30/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	MW25 1/30/94	SM002SB003 1/7/94	SM008MW001 2/15/94	SM008MW003 2/8/94	SM008SB003 1/21/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	MW25 1/30/94	SM002SB003 1/7/94	SM008MW001 2/15/94	SM008MW003 2/8/94	SM008SB003 1/21/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	SM008SB007	SM008SB008	SM011MW001	SM011SB001	SM011SB006
Sample Date:	1/20/94	1/22/94	2/3/94	1/5/94	1/6/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
-----					
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
-----					
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
-----					
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	SM008SB007	SM008SB008	SM011MB001	SM011SB001	SM011SB006
Sample Date:	1/20/94	1/22/94	2/3/94	1/5/94	1/6/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	SM011SE002	SM017SB002	SM25CSB004	SMBKGMW002	SMBKGMW003
Sample Date:	1/12/94	12/17/93	2/9/94	2/3/94	2/3/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	62	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	50	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	51	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	SM011SE002 1/12/94	SM017SB002 12/7/93	SM25CSB004 2/9/94	SMBKGMW002 2/3/94	SMBKGMW003 2/3/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	48	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	SMBKGMW005	SMBKGMW006	SMBKGMW007	SMBKGSB003	SMBKGS014
Sample Date:	2/5/94	2/5/94	2/5/94	12/3/93	3/10/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2 R	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	SMBKGMW005	SMBKGMW006	SMBKGMW007	SMBKGSB003	SMBKGSE014
Sample Date:	2/5/94	2/5/94	2/5/94	12/3/93	3/10/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name:	SMBKGE017	SMBKGSW001	SMBKGSW002	SMBKGSW003	SMBKGSW004
Sample Date:	2/24/94	3/9/94	3/8/94	3/4/94	3/3/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	SMBKGSE017 2/24/94	SMBKGSW001 3/9/94	SMBKGSW002 3/8/94	SMBKGSW003 3/4/94	SMBKGSW004 3/3/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	SMBKGSW005 3/3/94	SMBKGSW006 3/4/94	SMBKGSW007 3/6/94	SMBKGSW008 3/6/94	SMBKGSW009 3/8/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	SMBKGSW005 3/3/94	SMBKGSW006 3/4/94	SMBKGSW007 3/6/94	SMBKGSW008 3/6/94	SMBKGSW009 3/8/94
Analytes					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	SMBKGSW010 3/7/94	SMBKGSW011 3/2/94	SMBKGSW012 3/2/94	SMBKGSW013 3/3/94	SMBKGSW014 3/10/94
Analytes					
-----					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2
2-Butanone	< 10	< 10	< 10	< 10	< 10
2-Chloroethyl vinyl ether	< 10	< 10	< 10	< 10	< 10
2-Hexanone	< 10	< 10	< 10	< 10	< 10
Acetone	< 10	< 10	< 10	< 10	< 10
Benzene	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2
Bromoform	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2
Carbon disulfide	< 10	< 10	< 10	< 10	< 10
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: Sample Date:	SMBKGSW010 3/7/94	SMBKGSW011 3/2/94	SMBKGSW012 3/2/94	SMBKGSW013 3/3/94	SMBKGSW014 3/10/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroform	< 2	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2
Ethylbenzene	< 2	< 2	< 2	< 2	< 2
Methyl isobutyl ketone	< 10	< 10	< 10	< 10	< 10
Methylene chloride	< 10	< 10	< 10	< 10	< 10
Styrene	< 2	< 2	< 2	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2	< 2	< 2
Toluene	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2
Vinyl acetate	< 10	< 10	< 10	< 10	< 10
Vinyl chloride	< 2	< 2	< 2	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: SMBKGSW015  
Sample Date: 3/11/94

Analytes	
-----	
Volatile Organic Compounds	
1,1,1-Trichloroethane	< 2
1,1,2,2-Tetrachloroethane	< 2
1,1,2-Trichloroethane	< 2
1,1-Dichloroethane	< 2
1,1-Dichloroethene	< 2
1,2-Dichloroethane	< 2
1,2-Dichloroethylenes (cis and trans isomers)	< 2
1,2-Dichloropropane	< 2
2-Butanone	< 10
2-Chloroethyl vinyl ether	< 10
2-Hexanone	< 10
Acetone	< 10
Benzene	< 2
Bromodichloromethane	< 2
Bromoform	< 2
Bromomethane	< 2
Carbon disulfide	< 10
Carbon tetrachloride	< 2
Chlorobenzene	< 2
Chloroethane	< 10

-----  
Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D7.  
Summary of Trip Blank Samples Analytical Results

Sample Name: SMBKGSW015  
Sample Date: 3/11/94

Analytes	
-----	
Volatile Organic Compounds	
Chloroform	< 2
Chloromethane	< 2
Dibromochloromethane	< 2
Ethylbenzene	< 2
Methyl isobutyl ketone	< 10
Methylene chloride	< 10
Styrene	< 2
Tetrachloroethene	< 2
Toluene	< 2
Trichloroethene	< 2
Vinyl acetate	< 10
Vinyl chloride	< 2
Xylenes, total combined	< 10
cis-1,3-Dichloropropene	< 2
trans-1,3-Dichloropropene	< 2

-----  
Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
-----				
Volatile Organic Compounds				
1,1,1-Trichloroethane	NA	< 2	< 2	NA
1,1,2,2-Tetrachloroethane	NA	< 2	< 2	NA
1,1,2-Trichloroethane	NA	< 2	< 2	NA
1,1-Dichloroethane	NA	< 2	< 2	NA
1,1-Dichloroethene	NA	< 2	< 2	NA
1,2-Dichloroethane	NA	< 2	< 2	NA
1,2-Dichloroethylenes (cis and trans isomers)	NA	< 2	< 2	NA
1,2-Dichloropropane	NA	< 2	< 2	NA
2-Butanone	NA	< 10	< 10	NA
2-Chloroethyl vinyl ether	NA	< 10	< 10	NA
2-Hexanone	NA	< 10	< 10	NA
Acetone	NA	< 10	< 10	NA
Benzene	NA	< 2	< 2	NA
Bromodichloromethane	NA	< 2	2.8	NA
Bromoform	NA	< 2	< 2	NA
		R	R	
Bromomethane	NA	< 2	< 2	NA
Carbon disulfide	NA	< 10	< 10	NA
Carbon tetrachloride	NA	< 2	< 2	NA
Chlorobenzene	NA	< 2	< 2	NA
Chloroethane	NA	< 10	< 10	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	RINSEWATER	RINSEWATER	RINSEWATER	RINSEWATER
Sample Date:	11/12/93	11/30/93	11/5/93	12/2/93
-----				
Analytes				
-----				
Volatile Organic Compounds				
Chloroform	NA	5.8	21	NA
Chloromethane	NA	< 2	< 2	NA
Dibromochloromethane	NA	< 2	< 2	NA
Ethylbenzene	NA	< 2	< 2	NA
Methyl isobutyl ketone	NA	< 10	< 10	NA
Methylene chloride	NA	< 10	< 10	NA
Styrene	NA	< 2	< 2	NA
Tetrachloroethene	NA	< 2	< 2	NA
Toluene	NA	< 2	< 2	NA
Trichloroethene	NA	< 2	< 2	NA
Vinyl acetate	NA	< 10	< 10	NA
Vinyl chloride	NA	< 2	< 2	NA
Xylenes, total combined	NA	< 10	< 10	NA
cis-1,3-Dichloropropene	NA	< 2	< 2	NA
trans-1,3-Dichloropropene	NA	< 2	< 2	NA
Semivolatile Organic Compounds				
1,2,4-Trichlorobenzene	NA	< 2	< 2	NA
1,2-Dichlorobenzene	NA	< 2	< 2	NA
1,2-Epoxydichlorohexene	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	< 2	< 2	NA
1,4-Dichlorobenzene	NA	< 2	< 2	NA

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Semivolatile Organic Compounds				
2,4,5-Trichlorophenol	NA	< 2	< 2	NA
2,4,6-Trichlorophenol	NA	< 2	< 2	NA
2,4-Dichlorophenol	NA	< 2	< 2	NA
2,4-Dichlorophenylacetic acid / DCAA	NA	1.3	NA	NA
2,4-Dimethylphenol	NA	< 2	< 2	NA
2,4-Dinitrophenol	NA	< 30	< 30	NA
2,4-Dinitrotoluene	NA	< 2	< 2	NA
2,6-Dinitrotoluene	NA	< 2	< 2	NA
2-Chloronaphthalene	NA	< 2	< 2	NA
2-Chlorophenol	NA	< 2	< 2	NA
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	< 20	< 20	NA
2-Methylnaphthalene	NA	< 2	< 2	NA
2-Methylphenol / o-Cresol	NA	< 2	< 2	NA
2-Nitroaniline	NA	< 10	< 10	NA
2-Nitrophenol	NA	< 2	< 2	NA
3,3'-Dichlorobenzidine	NA	< 10	< 10	NA
3-Nitroaniline	NA	< 10	< 10	NA
4-Bromophenylphenyl ether	NA	< 2	< 2	NA
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	< 2	< 2	NA
4-Chloroaniline	NA	< 2	< 2	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Semivolatile Organic Compounds				
4-Chlorophenylphenyl ether	NA	< 2	< 2	NA
4-Methylphenol / p-Cresol	NA	< 2	< 2	NA
4-Nitroaniline	NA	< 10	< 10	NA
4-Nitrophenol	NA	< 20	< 20	NA
Acenaphthene	NA	< 2	< 2	NA
Acenaphthylene	NA	< 2	< 2	NA
Anthracene	NA	< 2	< 2	NA
Benzo[a]anthracene	NA	< 2	< 2	NA
Benzo[a]pyrene	NA	< 2	< 2	NA
Benzo[b]fluoranthene	NA	< 2	< 2	NA
Benzo[def]phenanthrene	NA	< 2	< 2	NA
Benzo[g,h,i]perylene	NA	< 2	< 2	NA
Benzo[k]fluoranthene	NA	< 2	< 2	NA
Benzoic acid	NA	< 20	< 20	NA
Benzyl alcohol	NA	< 2	< 2	NA
Butylbenzyl phthalate	NA	< 2	< 2	NA
Carbazole	NA	< 2	R	NA
Chrysene	NA	< 2	< 2	NA
Di-N-butyl phthalate	NA	< 2	< 2	NA
Di-N-octyl phthalate	NA	< 2	< 2	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Semivolatile Organic Compounds				
Dibenz[ah]anthracene	NA	< 2	< 2	NA
Dibenzofuran	NA	< 2	< 2	NA
Diethyl phthalate	NA	< 2	< 2	NA
Dimethyl phthalate	NA	< 2	< 2	NA
Fluoranthene	NA	< 2	< 2	NA
Fluorene	NA	< 2	< 2	NA
Hexachloro-1,3-butadiene	NA	< 2	< 2	NA
Hexachlorobenzene	NA	< 2	< 2	NA
Hexachlorocyclopentadiene	NA	< 10	< 10	NA
Hexachloroethane	NA	< 2	< 2	NA
Hexanedioic acid dioctyl ester	NA	10	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	< 2	< 2	NA
Isophorone	NA	< 2	< 2	NA
N-Nitrosodi-N-propylamine	NA	< 2	< 2	NA
N-Nitrosodiphenylamine	NA	< 2	< 2	NA
Naphthalene	NA	< 2	< 2	NA
Nitrobenzene	NA	< 2	< 2	NA
Pentachlorophenol	NA	< 10	< 10	NA
Pentacosane	NA	NA	1.72	NA
Phenanthrene	NA	< 2	< 2	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Semivolatiles Organic Compounds				
Phenol	NA	< 2	< 2	NA
Phosphoric acid triphenyl ester	NA	6.88	8.73	NA
bis(2-Chloroethoxy)methane	NA	< 2	< 2	NA
bis(2-Chloroethyl)ether	NA	< 2	< 2	NA
bis(2-Chloroisopropyl)ether	NA	< 2	< 2	NA
bis(2-Ethylhexyl)phthalate	NA	< 2	2.7	NA
Pesticides/PCBs				
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	< .007	< .007	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	< .005	< .005	NA
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	< .007	< .007	NA
Aldrin	NA	< .005	< .005	NA
Dieldrin	NA	< .005	< .005	NA
Dimethoate	NA	< .25	< .25	NA
Endosulfan sulfate	NA	< .005	< .005	NA
Endrin	NA	< .005	< .005	NA
Endrin aldehyde	NA	< .02	< .02	NA
Endrin ketone	NA	< .006	< .006	NA
Heptachlor	NA	< .005	< .005	NA
Heptachlor epoxide	NA	< .005	< .005	NA
Lindane	NA	< .005	< .005	NA
Methoxychlor	NA	< .009	< .009	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Pesticides/PCBs				
PCB 1016	NA	< .13	< .13	NA
PCB 1221	NA	< .13	< .13	NA
PCB 1232	NA	< .13	< .13	NA
PCB 1242	NA	< .13	< .13	NA
PCB 1248	NA	< .13	< .13	NA
PCB 1254	NA	< .13	< .13	NA
PCB 1260	NA	< .13	< .13	NA
Toxaphene	NA	< .6	< .6	NA
alpha-Benzenhexachloride	NA	< .005	< .005	NA
alpha-Chlordane	NA	< .005	< .005	NA
alpha-Endosulfan	NA	< .005	< .005	NA
beta-Benzenhexachloride	NA	< .005	< .005	NA
beta-Endosulfan	NA	< .005	< .005	NA
delta-Benzenhexachloride	NA	< .005	< .005	NA
gamma-Chlordane	NA	< .005	< .005	NA
Herbicides				
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	< .1	< .1	NA
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	< .1	< .1	NA
2,4-Dichlorophenoxyacetic acid / 2,4-D	NA	< .1	< .1	NA
2,4-Dinitro-6-sec-butylphenol / Dinoseb	NA	< .1	< .1	NA
2-(2,4-Dichlorophenoxy)propionic acid	NA	< .1	< .1	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Herbicides				
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	NA	< .1	< .1	NA
245TP / Silvex	NA	< .1	< .1	NA
Dalapon / alpha, alpha-Dichloropropionic acid	NA	< .1	< .1	NA
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	NA	< 3	< 3	NA
Mecoprop	NA	< 3	< 3	NA
Dioxins/Furans				
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NA	NA	< .0034	< .0000096
1,2,3,4,6,7,8-Heptachlorodibenzofuran	NA	NA	< .0027	< .0000019
1,2,3,4,7,8,9-Heptachlorodibenzofuran	NA	NA	< .0027	< .0000022
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NA	NA	< .0024	< .00001
1,2,3,4,7,8-Hexachlorodibenzofuran	NA	NA	< .0016	< .0000046
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NA	NA	< .0024	< .000009
1,2,3,6,7,8-Hexachlorodibenzofuran	NA	NA	< .0016	< .0000044
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NA	NA	< .0024	< .0000085
1,2,3,7,8,9-Hexachlorodibenzofuran	NA	NA	< .0016	< .0000054
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NA	NA	< .0029	< .000011
1,2,3,7,8-Pentachlorodibenzofuran	NA	NA	< .0012	< .0000094
2,3,4,6,7,8-Hexachlorodibenzofuran	NA	NA	< .0016	< .0000036
2,3,4,7,8-Pentachlorodibenzofuran	NA	NA	< .0012	< .0000098
2,3,7,8-Tetrachlorodibenzo[b,e][1,4]dioxin	NA	NA	< .00081	< .0000052
2,3,7,8-Tetrachlorodibenzofuran	NA	NA	< .00091	< .000003

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Dioxins/Furans				
Octachlorodibenzodioxin, non-specific	NA	NA	< .0096	< .000014
Octachlorodibenzofuran, non-specific	NA	NA	< .015	< .0000086
Total Heptachlorodibenzo-p-dioxins	NA	NA	< .0034	< .0000096
Total Heptachlorodibenzofurans	NA	NA	< .0027	< .0000022
Total Hexachlorodibenzo-p-dioxins	NA	NA	< .0024	< .00001
Total Hexachlorodibenzofurans	NA	NA	< .0016	< .0000054
Total Pentachlorodibenzo-p-dioxins	NA	NA	< .0029	< .000026
Total Pentachlorodibenzofurans	NA	NA	< .0012	< .0000098
Total Tetrachlorodibenzo-p-dioxins	NA	NA	< .00081	< .0000052
Total Tetrachlorodibenzofurans	NA	NA	< .00091	< .000003
Metals				
Aluminum	NA	151	2000	NA
Antimony	NA	< 3.05	< 3.05	NA
Arsenic	NA	< 2.5	47.9	NA
Barium	NA	< 25	2000	NA
Beryllium	NA	< 5	51.6	NA
Boron	NA	< 50	< 50	NA
Cadmium	NA	< 5	47.9	NA
Calcium	NA	< 100	9930	NA
Chromium	NA	< 10	199	NA
Cobalt	NA	< 20	490	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	RINSEWATER 11/12/93	RINSEWATER 11/30/93	RINSEWATER 11/5/93	RINSEWATER 12/2/93
Analytes				
Metals				
Copper	NA	< 5	243	NA
Cyanide	< 2.5	< 2.5	NA	NA
Iron	NA	< 45	994	NA
Lead	NA	10.8	47.4	NA
Magnesium	NA	< 50	9900	NA
Manganese	NA	< 5	493	NA
Mercury	NA	< .2	4.14	NA
Nickel	NA	< 15	484	NA
Potassium	NA	< 550	9730	NA
Selenium	NA	< 2.5	48.7	NA
Silver	NA	< 5	50.3	NA
Sodium	NA	< 100	9710	NA
Thallium	NA	< 2.5	51.7	NA
Vanadium	NA	< 10	91.7	NA
Zinc	NA	< 20	488	NA
Landfill Parameters				
Alkalinity	NA	6000	5000	NA
Ammonia	NA	1000	900	NA
Chemical oxygen demand	NA	NA	98000	NA
Chloride	NA	10000	< 500	NA
Diesel fuel	NA	NA	< .4	NA

Note: Results are reported in micrograms per liter (ug/l)  
 NA -- not analyzed  
 < -- less than  
 Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	RINSEWATER	RINSEWATER	RINSEWATER	RINSEWATER
Sample Date:	11/12/93	11/30/93	11/5/93	12/2/93
Analytes				
-----				
Landfill Parameters				
Fluoride	NA	10000	< 500	NA
Gasoline / Gasoline, regular	NA	NA	< .4	NA
Nitrite, nitrate-non specific	NA	190	190	NA
Sulfate	NA	100000	< 5000	NA
Total dissolved solids	NA	< 10000	10000 D	NA
Total organic carbon	NA	58000	54000	NA
Total recoverable phenolics	NA	47.9	46.5	NA
pH	NA	NA	5.8 D	NA
Others				
Bromide	NA	NA	< 1000 /J	NA
Specific conductivity	NA	NA	< 10	NA
Total hardness	NA	38000	39000	NA

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:  
Sample Date:

RINSEWATER  
11/12/93

RINSEWATER  
11/30/93

RINSEWATER  
11/5/93

RINSEWATER  
12/2/93

Analytes

Note: Results are reported in micrograms per liter (ug/L)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	TAPWATER 11/12/93	TAPWATER 11/5/93
Analytes		
-----		
Volatile Organic Compounds		
1,1,1-Trichloroethane	NA	< 2
1,1,2,2-Tetrachloroethane	NA	< 2
1,1,2-Trichloroethane	NA	< 2
1,1-Dichloroethane	NA	< 2
1,1-Dichloroethene	NA	< 2
1,2-Dichloroethane	NA	< 2
1,2-Dichloroethylenes (cis and trans isomers)	NA	< 2
1,2-Dichloropropane	NA	< 2
2-Butanone	NA	< 10
2-Chloroethyl vinyl ether	NA	< 10
2-Hexanone	NA	< 10
Acetone	NA	< 10
Benzene	NA	< 2
Bromodichloromethane	NA	3.1
Bromoform	NA	< 2
		R
Bromomethane	NA	< 2
Carbon disulfide	NA	< 10
Carbon tetrachloride	NA	< 2
Chlorobenzene	NA	< 2
Chloroethane	NA	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: TAPWATER  
Sample Date: 11/12/93

Analytes	TAPWATER 11/12/93	TAPWATER 11/5/93
<b>Volatiles Organic Compounds</b>		
Chloroform	NA	2.3
Chloromethane	NA	< 2
Dibromochloromethane	NA	3
Ethylbenzene	NA	< 2
Methyl isobutyl ketone	NA	< 10
Methylene chloride	NA	< 10
Styrene	NA	< 2
Tetrachloroethene	NA	< 2
Toluene	NA	< 2
Trichloroethene	NA	< 2
Vinyl acetate	NA	< 10
Vinyl chloride	NA	< 2
Xylenes, total combined	NA	< 10
cis-1,3-Dichloropropene	NA	< 2
trans-1,3-Dichloropropene	NA	< 2
<b>Semivolatile Organic Compounds</b>		
1,2,4-Trichlorobenzene	NA	< 2
1,2-Dichlorobenzene	NA	< 2
1,2-Epoxydichlorobenzene	NA	40 S
1,3-Dichlorobenzene	NA	< 2
1,4-Dichlorobenzene	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1



Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	TAPWATER	TAPWATER
Sample Date:	11/12/93	11/5/93
Analytes		
-----		
Semivolatiles Organic Compounds		
2,4,5-Trichlorophenol	NA	< 2
2,4,6-Trichlorophenol	NA	< 2
2,4-Dichlorophenol	NA	< 2
2,4-Dichlorophenylacetic acid / DCAA	NA	NA
2,4-Dimethylphenol	NA	< 2
2,4-Dinitrophenol	NA	< 30
2,4-Dinitrotoluene	NA	< 2
2,6-Dinitrotoluene	NA	< 2
2-Chloronaphthalene	NA	< 2
2-Chlorophenol	NA	< 2
2-Methyl-4,6-dinitrophenol / 4,6-Dinitro-2-cresol	NA	< 20
2-Methylnaphthalene	NA	< 2
2-Methylphenol / o-Cresol	NA	< 2
2-Nitroaniline	NA	< 10
2-Nitrophenol	NA	< 2
3,3'-Dichlorobenzidine	NA	< 10
3-Nitroaniline	NA	< 10
4-Bromophenylphenyl ether	NA	< 2
4-Chloro-3-cresol / 3-Methyl-4-chlorophenol	NA	< 2
4-Chloroaniline	NA	< 2

-----  
Note: Results are reported in micrograms per liter (ug/L)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	TAPWATER	TAPWATER
Sample Date:	11/12/93	11/5/93
Analytes		
Semivolatiles Organic Compounds		
4-Chlorophenylphenyl ether	NA	< 2
4-Methylphenol / p-Cresol	NA	< 2
4-Nitroaniline	NA	< 10
4-Nitrophenol	NA	< 20
Acenaphthene	NA	< 2
Acenaphthylene	NA	< 2
Anthracene	NA	< 2
Benzo[a]anthracene	NA	< 2
Benzo[a]pyrene	NA	< 2
Benzo[b]fluoranthene	NA	< 2
Benzo[def]phenanthrene	NA	< 2
Benzo[g,h,i]perylene	NA	< 2
Benzo[k]fluoranthene	NA	< 2
Benzoic acid	NA	< 20
Benzyl alcohol	NA	< 2 R
Butylbenzyl phthalate	NA	< 2
Carbazole	NA	< 2 R
Chrysene	NA	< 2
Di-N-butyl phthalate	NA	< 2
Di-N-octyl phthalate	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	TAPWATER	TAPWATER
Sample Date:	11/12/93	11/5/93
Analytes		
-----		
Semivolatile Organic Compounds		
Dibenz[ah]anthracene	NA	< 2
Dibenzofuran	NA	< 2
Diethyl phthalate	NA	< 2 R
Dimethyl phthalate	NA	< 2
Fluoranthene	NA	< 2
Fluorene	NA	< 2
Hexachloro-1,3-butadiene	NA	< 2
Hexachlorobenzene	NA	< 2
Hexachlorocyclopentadiene	NA	< 10
Hexachloroethane	NA	< 2
Hexanedioic acid dioctyl ester	NA	NA
Indeno[1,2,3-c,d]pyrene	NA	< 2
Isophorone	NA	< 2
N-Nitrosodi-N-propylamine	NA	< 2
N-Nitrosodiphenylamine	NA	< 2
Naphthalene	NA	< 2
Nitrobenzene	NA	< 2
Pentachlorophenol	NA	< 10
Pentacosane	NA	1.7
Phenanthrene	NA	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: TAPWATER  
Sample Date: 11/12/93

Analytes	TAPWATER 11/12/93	TAPWATER 11/5/93
-----		
Semivolatle Organic Compounds		
Phenol	NA	< 2
Phosphoric acid triphenyl ester	NA	8.43
bis(2-Chloroethoxy)methane	NA	< 2
bis(2-Chloroethyl)ether	NA	< 2
bis(2-Chloroisopropyl)ether	NA	< 2
bis(2-Ethylhexyl)phthalate	NA	4.8
Pesticides/PCBs		
2,2-bis(p-Chlorophenyl)-1,1,1-trichloroethane	NA	< .007
2,2-bis(p-Chlorophenyl)-1,1-dichloroethane	NA	< .005
2,2-bis(p-Chlorophenyl)-1,1-dichloroethene	NA	< .007
Aldrin	NA	< .005
Dieldrin	NA	< .005
Dimethoate	NA	< .25
Endosulfan sulfate	NA	< .005
Endrin	NA	< .005
Endrin aldehyde	NA	< .02
Endrin ketone	NA	< .006
Heptachlor	NA	< .005
Heptachlor epoxide	NA	< .005
Lindane	NA	< .005
Methoxychlor	NA	< .009

Note: Results are reported in micrograms per liter (ug/l)  
NA -- not analyzed  
< -- less than  
Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	TAPWATER 11/12/93	TAPWATER 11/5/93
Analytes		
Pesticides/PCBs		
PCB 1016	NA	< .13
PCB 1221	NA	< .13
PCB 1232	NA	< .13
PCB 1242	NA	< .13
PCB 1248	NA	< .13
PCB 1254	NA	< .13
PCB 1260	NA	< .13
Toxaphene	NA	< .6
alpha-Benzenhexachloride	NA	< .005
alpha-Chlordane	NA	< .005
alpha-Endosulfan	NA	< .005
beta-Benzenhexachloride	NA	< .005
beta-Endosulfan	NA	< .005
delta-Benzenhexachloride	NA	< .005
gamma-Chlordane	NA	< .005
Herbicides		
(2,4,5-Trichlorophenoxy)acetic acid / 245T	NA	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	NA	< .1
2,4-Dichlorophenoxyacetic acid / 2,4-D	NA	< .1
2,4-Dinitro-6-sec-butylphenol / Dinoseb	NA	< .1
2-(2,4-Dichlorophenoxy)propionic acid	NA	< .1

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: Sample Date:	TAPWATER 11/12/93	TAPWATER 11/5/93
Analytes		
Herbicides		
2-Methoxy-3,6-dichlorobenzoic acid / Dicamba	NA	< .1
245TP / Silvex	NA	< .1
Dalapon / alpha-Dichloropropionic acid	NA	< .1
MCPA / (4-Chloro-2-methylphenoxy)acetic acid	NA	< 3
Mecoprop	NA	< 3
Dioxins/Furans		
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NA	< .0032
1,2,3,4,6,7,8-Heptachlorodibenzofuran	NA	< .003
1,2,3,4,7,8,9-Heptachlorodibenzofuran	NA	< .003
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NA	< .0041
1,2,3,4,7,8-Hexachlorodibenzofuran	NA	< .0017
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NA	< .0041
1,2,3,6,7,8-Hexachlorodibenzofuran	NA	< .0017
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NA	< .0041
1,2,3,7,8,9-Hexachlorodibenzofuran	NA	< .0017
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NA	< .0042
1,2,3,7,8-Pentachlorodibenzofuran	NA	< .0018
2,3,4,6,7,8-Hexachlorodibenzofuran	NA	< .0017
2,3,4,7,8-Pentachlorodibenzofuran	NA	< .0018
2,3,7,8-Tetrachlorodibenzo[b,e][1,4]dioxin	NA	< .00079
2,3,7,8-Tetrachlorodibenzofuran	NA	< .00088

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	TAPWATER	TAPWATER
Sample Date:	11/12/93	11/5/93
Analytes		
Dioxins/Furans		
Octachlorodibenzodioxin, non-specific	NA	< .0085
Octachlorodibenzofuran, non-specific	NA	< .01
Total Heptachlorodibenzo-p-dioxins	NA	< .0032
Total Heptachlorodibenzofurans	NA	< .003
Total Hexachlorodibenzo-p-dioxins	NA	< .0041
Total Hexachlorodibenzofurans	NA	< .0017
Total Pentachlorodibenzo-p-dioxins	NA	< .0042
Total Pentachlorodibenzofurans	NA	< .0018
Total Tetrachlorodibenzo-p-dioxins	NA	< .00079
Total Tetrachlorodibenzofurans	NA	< .00088
Metals		
Aluminum	NA	< 40
Antimony	NA	53.7
Arsenic	NA	< 2.5
Barium	NA	< 25
Beryllium	NA	< 5
Boron	NA	65.4
Cadmium	NA	< 5
Calcium	NA	22100
Chromium	NA	< 10
Cobalt	NA	< 20

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name: TAPWATER  
Sample Date: 11/12/93

Analytes	TAPWATER 11/12/93	TAPWATER 11/5/93
<b>Metals</b>		
Copper	NA	67.8 /J
Cyanide	111	NA
Iron	NA	< 45
Lead	NA	3
Magnesium	NA	6340
<b>Manganese</b>		
Manganese	NA	6.57
Mercury	NA	< .2
Nickel	NA	< 15
Potassium	NA	970
Selenium	NA	< 2.5
<b>Silver</b>		
Silver	NA	< 5
Sodium	NA	123000 /I
Thallium	NA	< 2.5
Vanadium	NA	< 5
Zinc	NA	43.6 /I
<b>Landfill Parameters</b>		
Alkalinity	NA	96000
Ammonia	NA	< 50
Chemical oxygen demand	NA	< 5000
Chloride	NA	60000
Diesel fuel	NA	< .4

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D8.  
Summary of Analytical Results for Rinsewater and Tapwater

Sample Name:	TAPWATER	TAPWATER
Sample Date:	11/12/93	11/5/93
Analytes		
-----		
Landfill Parameters		
Fluoride	NA	930
Gasoline / Gasoline, regular	NA	< .4
Nitrite, nitrate-non specific	NA	< 20
Sulfate	NA	34000
Total dissolved solids	NA	420000
Total organic carbon	NA	2900
Total recoverable phenolics	NA	< 2
pH	NA	7.4 D
Others		
Bromide	NA	20000 /J
Specific conductivity	NA	730 D
Total hardness	NA	87000

-----

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Semivolatiles Organic Compounds

1,2,4-Trichlorobenzene	< .7
1,2-Dichlorobenzene	< .7
1,3-Dichlorobenzene	< .7
1,4-Dichlorobenzene	< .7
2,4,5-Trichlorophenol	< 2
2,4,6-Trichlorophenol	< 2
2,4-Dichlorophenol	< .7
2,4-Dimethylphenol	< .7
2,4-Dinitrophenol	< 7 j
2,4-Dinitrotoluene	< .7
2,6-Dinitrotoluene	< .7
2-Chloronaphthalene	< .7
2-Chlorophenol	< .7
2-Methylnaphthalene	2
2-Methylphenol	< .7
2-Nitroaniline	< 3
2-Nitrophenol	< .7
3,3'-Dichlorobenzidine	< 3
3-Methyl-4-chlorophenol	< .7

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Semivolatile Organic Compounds

3-Nitroaniline < 3  
4,6-Dinitro-2-cresol < 7 j  
4-Bromophenylphenyl ether < .7  
4-Chloroaniline < 2  
4-Chlorophenylphenyl ether < .7

4-Methylphenol < .7  
4-Nitroaniline < 3  
4-Nitrophenol < 7  
Acenaphthene < .7  
Acenaphthylene 2

Anthracene < .7  
Benzo[a]anthracene 10  
Benzo[b]fluoranthene 20  
Benzo[g,h,i]perylene 6  
Benzo[k]fluoranthene 6

Benzo[a]pyrene 10  
Benzo[e]pyrene 2 s  
Benzoic acid < 7  
Benzyl alcohol < .7

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Semivolatile Organic Compounds

Bis (2-Ethylhexyl) phthalate	< .7
Butylbenzylphthalate	< .7
Carbazole	< .7
Chrysene	10
Di-N-butyl phthalate	< .7
Di-N-octyl phthalate	< .7
Dibenzo[A,H]anthracene	2
Dibenzofuran	< .7
Diethylphthalate	< .7
Dimethylphthalate	< .7
Fluoranthene	20
Fluorene	< .7
Hexachlorobenzene	< .7
Hexachlorobutadiene	< .7
Hexachlorocyclopentadiene	< 5 j
Hexachloroethane	< .7
Indeno[1,2,3-C,D]pyrene	6
Isophorone	< .7
N-Nitrosodi-N-propylamine	< .7

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Semivolatile Organic Compounds

N-Nitrosodiphenylamine	< .7
Naphthalene	3
Nitrobenzene	< .7
Pentachlorophenol	< 3
Phenanthrene	10
Phenol	< .7
Pyrene	20
bis (2-Chloroethoxy) methane	< .7
bis (2-Chloroethyl) ether	< .7
bis (2-Chloroisopropyl) ether	< .7

Pesticides/PCBs

2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	.00495
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .003
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .003
Aldrin	< .003
Dieldrin	< .003
Dimethoate	< .033
Endosulfan sulfate	< .003
Endrin	< .003
Endrin aldehyde	< .022

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Pesticides/PCBs	
Endrin ketone	< .003
Heptachlor	< .003
Heptachlor epoxide	< .003
Lindane	< .003
Methoxychlor	< .003
PCB 1016	< .013
PCB 1221	< .013
PCB 1232	< .013
PCB 1242	< .013
PCB 1248	< .013
PCB 1254	< .013
PCB 1260	< .013
Toxaphene	< .3
alpha-Benzenehexachloride	< .003
alpha-Chlordane	< .003
alpha-Endosulfan/Endosulfan I	< .003
beta-Benzenehexachloride	< .003
beta-Endosulfan/Endosulfan II	< .003
delta-Benzenehexachloride	< .003

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Pesticides/PCBs

gamma-Chlordane < .003

Herbicides

2,4-D / 2,4-Dichlorophenoxyacetic acid < .01  
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid < .01

245T < .01 j

245TP < .01

Dalapon < .01

Dicamba < .01

Dichloroprop < .01

Dinoseb < .01

MCPA < .2

MCPB < .2 j

Metals

Aluminum 4380 j

Antimony < 5 j/j

Arsenic 14 rr

Barium < 39.8

Beryllium < .5

Cadmium .783

Calcium 79500

Chromium 9.91

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D9: Summary of Analytical Results for  
Sample SMBKGSS014

Sample Name: SMBKGSS014  
Depth (feet): 0  
Sample Date: 11/29/93

Analytes

Metals

Cobalt 3.92  
Copper 35.7  
Cyanide < .25  
Iron 16100  
Lead 55.3

Magnesium 26500  
Manganese 300  
Mercury < .1  
Nickel 11.2  
Potassium 714

Selenium .56 J  
Silver < .5  
Sodium 392  
Thallium 26.5  
Vanadium 15

Zinc 173

Landfill Parameters

Ammonia 114  
Nitrite, Nitrate -- Non-Specific 6.19

Note: Results are reported in micrograms per gram (ug/g)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name: Depth (feet): Sample Date:	MW16 12 01/26/94	MW17 14 01/29/94	MW17-DUP 14 01/29/94	MW24 14 01/30/94	SMBKGMW006 9 02/05/94
Analytes					
Volatile Organic Compounds					
1,1,1-Trichloroethane	< 2	< 2	< 2 D	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2 D	< 2	< 2 j
1,1,2-Trichloroethane	< 2	< 2	< 2 D	< 2	< 2
1,1-Dichloroethane	< 2	< 2	< 2 D	< 2	< 2
1,1-Dichloroethene	< 2	< 2	< 2 D	< 2	< 2
1,2-Dichloroethane	< 2	< 2	< 2 D	< 2	< 2
1,2-Dichloroethenes (cis & trans)	< 2	< 2	< 2 D	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2 D	< 2	< 2
2-Chloroethylvinyl ether	< 10 rr	< 10 rr	< 10 Dr	< 10 rr	< 10 rr
Acetic acid, vinyl ester	< 10	< 10	< 10 D	< 10	< 10
Acetone	< 10 j	< 10 j	< 10 Dj	< 10	< 10 j
Benzene	< 2	< 2	< 2 D	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2 D	< 2	< 2
Bromoform	< 2	< 2	< 2 D	< 2	< 2
Bromomethane	< 2	< 2	< 2 D	< 2	< 2
Carbon disulfide	< 10 j	< 10 j	< 10 Dj	< 10	< 10 j
Carbon tetrachloride	< 2	< 2	< 2 D	< 2	< 2
Chlorobenzene	< 2	< 2	< 2 D	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name: Depth (feet): Sample Date:	MW16 12 01/26/94	MW17 14 01/29/94	MW17-DUP 14 01/29/94	MW24 14 01/30/94	SMBKGMW006 9 02/05/94
Analytes					
-----					
Volatile Organic Compounds					
Chloroethane	< 10	< 10	< 10 D	< 10	< 10
Chloroform	< 2	< 2	< 2 D	< 2	< 2
Chloromethane	< 2 j	< 2 j	< 2 Dj	< 2	< 2 j
Dibromochloromethane	< 2	< 2	< 2 D	< 2	< 2
Ethylbenzene	< 2	< 2	< 2 D	< 2	< 2
Methyl-N-butyl ketone	< 10 j	< 10 j	< 10 Dj	< 10 j	< 10 j
Methylene chloride	< 10	< 10	< 10 D	< 10	< 10
Methylethyl ketone/2-Butanone	< 10 rr	< 10 rr	< 10 Drr	< 10 rr	< 10 rr
Methylisobutyl ketone	< 10 j	< 10	< 10 D	< 10	< 10 j
Styrene	< 2	< 2	< 2 D	< 2	< 2
Tetrachloroethene	< 2	< 2	< 2 D	< 2	< 2
Toluene	< 2	< 2	< 2 D	< 2	< 2
Trichloroethene	< 2	< 2	< 2 D	< 2	< 2
Vinyl chloride	< 2	< 2	< 2 D	< 2	< 2
Xylenes, total combined	< 10	< 10	< 10 D	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2 D	< 2	< 2
trans-1,3-Dichloropropene	< 2	< 2	< 2 D	< 2	< 2 j
Semivolatile Organic Compounds					
1,2,4-Trichlorobenzene	< 2	< 2	< 2 D	< 2	< 2

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

&lt; -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name: Depth (feet): Sample Date:	MW16 12 01/26/94	MW17 14 01/29/94	MW17-DUP 14 01/29/94	MW24 14 01/30/94	SMBKGMW006 9 02/05/94
Analytes					
Semivolatile Organic Compounds					
1,2-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,2-Epoxydicyclohexene	NA	NA	NA	10	NA
1,3-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
1,4-Dichlorobenzene	< 2	< 2	< 2	< 2	< 2
2,4,5-Trichlorophenol	< 2	< 2	< 2	< 2	< 10
2,4,6-Trichlorophenol	< 2	< 2	< 2	< 2	< 10
2,4-Dichlorophenol	< 2	< 2	< 2	< 2	< 2
2,4-Dimethylphenol	< 2	< 2	< 2	< 2	< 2
2,4-Dinitrophenol	< 30	< 30	< 30	< 30	< 30
2,4-Dinitrotoluene	< 2	< 2	< 2	< 2	< 2
2,6-Dinitrotoluene	< 2	< 2	< 2	< 2	< 2
2-Chloronaphthalene	< 2	< 2	< 2	< 2	< 2
2-Chlorophenol	< 2	< 2	< 2	< 2	< 2
2-Cyclohexen-1-ol	NA	NA	NA	5	NA
2-Cyclohexen-1-one	NA	NA	NA	5	NA
2-Methylnaphthalene	< 2	< 2	< 2	< 2	< 2
2-Methylphenol	< 2	< 2	< 2	< 2	< 2
2-Nitroaniline	< 10	< 10	< 10	< 10	< 10

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name: Depth (feet): Sample Date:	MW16 12 01/26/94	MW17 14 01/29/94	MW17-DUP 14 01/29/94	MW24 14 01/30/94	SMBKGMW006 9 02/05/94
Analytes					
Semivolatile Organic Compounds					
2-Nitrophenol	< 2	< 2	< 2	< 2	< 2
3,3'-Dichlorobenzidine	< 10	< 10	< 10	< 10	< 10
3-Methyl-4-chlorophenol	< 2	< 2	< 2	< 2	< 2
3-Nitroaniline	< 10	< 10	< 10	< 10	< 10
4,6-Dinitro-2-cresol	< 20	< 20	< 20	< 20	< 20
4-Bromophenylphenyl ether	< 2	< 2	< 2	< 2	< 2
4-Chloroaniline	< 2	< 2	< 2	< 2	< 2
4-Chlorophenylphenyl ether	< 2	< 2	< 2	< 2	< 2
4-Methylphenol	< 2	< 2	< 2	< 2	< 2
4-Nitroaniline	< 10	< 10	< 10	< 10	< 10
4-Nitrophenol	< 20	< 20	< 20	< 20	< 20
Acenaphthene	< 2	< 2	< 2	< 2	< 2
Acenaphthylene	< 2	< 2	< 2	< 2	< 2
Anthracene	< 2	< 2	< 2	< 2	< 2
Benzo[A]anthracene	< 2	< 2	< 2	< 2	< 2
Benzo[B]fluoranthene	< 2	< 2	< 2	< 2	< 2
Benzo[G,H,I]perylene	< 2	< 2	< 2	< 2	< 2
Benzo[K]fluoranthene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name:	MW16	MW17	MW17-DUP	MW24	SMBKGMW006
Depth (feet):	12	14	14	14	9
Sample Date:	01/26/94	01/29/94	01/29/94	01/30/94	02/05/94
Analytes					
-----					
Semivolatile Organic Compounds					
Benzo[a]pyrene	< 2	< 2	< 2	< 2	< 2
Benzoic acid	< 20	< 20 J	< 20 Dj	< 20	< 20
Benzyl alcohol	< 2	< 2	< 2	< 2	< 2
Bis (2-Ethylhexyl) phthalate	5.7 b	3.1 b	2.3 Db	3.2 b	5.3 8b
Butylbenzylphthalate	< 2	< 2	< 2	< 2	< 2
Caprolactam	NA	NA	NA	80 S	NA
Carbazole	< 2	< 2	< 2	< 2	< 2
Chrysene	< 2	< 2	< 2	< 2	< 2
Di-N-butyl phthalate	< 2	< 2	< 2	< 2	< 2
Di-N-octyl phthalate	< 2	< 2	< 2	< 2	< 2
Dibenzo[A,H]anthracene	< 2	< 2	< 2	< 2	< 2
Dibenzofuran	< 2	< 2	< 2	< 2	< 2
Diethylphthalate	< 2 J	< 2 j	< 2 Dj	< 2 j	< 2
Dimethylphthalate	< 2	< 2	< 2	< 2	< 2
Fluoranthene	< 2	< 2	< 2	< 2	< 2
Fluorene	< 2	< 2	< 2	< 2	< 2
Hexachlorobenzene	< 2	< 2	< 2	< 2	< 2
Hexachlorobutadiene	< 2	< 2	< 2	< 2	< 2

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name:	MW16	MW17	MW17-DUP	MW24	SMBKGMW006
Depth (feet):	12	14	14	14	9
Sample Date:	01/26/94	01/29/94	01/29/94	01/30/94	02/05/94
-----					
Analytes					
-----					
Semivolatile Organic Compounds					
Hexachlorocyclopentadiene	< 10	< 10	< 10	< 10	< 10
Hexachloroethane	< 2	< 2	< 2	< 2	< 2
Indeno[1,2,3-c,d]pyrene	< 2	< 2	< 2	< 2	< 2
Isophorone	< 2	< 2	< 2	< 2	< 2
N-Nitrosodi-N-propylamine	< 2	< 2	< 2	< 2	< 2
N-Nitrosodiphenylamine	< 2	< 2	< 2	< 2	< 2
Naphthalene	< 2	< 2	< 2	< 2	< 2
Nitrobenzene	< 2	< 2	< 2	< 2	< 2
Pentachlorophenol	< 10	< 10	< 10	< 10	< 10
Phenanthrene	< 2	< 2	< 2	< 2	< 2
Phenol	< 2	< 2	< 2	< 2	< 2
Pyrene	< 2	< 2	< 2	< 2	< 2
bis (2-Chloroethoxy) methane	< 2	< 2	< 2	< 2	< 2
bis (2-Chloroethyl) ether	< 2	< 2	< 2	< 2	< 2
bis (2-Chloroisopropyl) ether	< 2	< 2	< 2	< 2	< 2
Pesticides/PCBs					
2,2-Bis (p-chlorophenyl)-1,1,1-trichloroethane	< .007 j	< .007 j	< .007 D j	< .007 j	< .007 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethane	< .005 j	< .005 j	< .005 D j	< .005 j	< .005 j
2,2-Bis (p-chlorophenyl)-1,1-dichloroethene	< .007 j	< .007 j	< .007 D j	< .007 j	< .007 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name: Depth (feet): Sample Date:	MW16 12 01/26/94	MW17 14 01/29/94	MW17-DUP 14 01/29/94	MW24 14 01/30/94	SMBKGMW006 9 02/05/94
Analytes					
Pesticides/PCBs					
Aldrin	< .005 j/l	< .005 j	< .005 dj	< .005 j	< .005 j
Dieldrin	< .005 j	< .005 j	< .005 dj	< .005 j	< .005 j
Dimethoate	< .25 j	< .25 j	< .25 dj	< .25 j	< .25 j
Endosulfan sulfate	< .005 j	< .005 j	< .005 dj	< .005 j	< .005 j
Endrin	< .005 j	< .005 j	< .005 dj	< .005 j	< .005 j
Endrin aldehyde	< .022 j	< .022 j	< .022 dj	< .022 j	< .022 j
Endrin ketone	< .006 j	< .006 j	< .006 dj	< .006 j	< .006 j
Heptachlor	< .005 j	< .005 j	< .005 dj	< .005 j	< .005 j
Heptachlor epoxide	< .005 j	< .005 j	< .005 dj	< .005 j	< .005 j
Lindane	< .005 j	< .005 j	< .005 dj	< .005 j	< .005 j
Methoxychlor	< .009 j/l	< .009 j	< .009 dj	< .009 j	< .009 j
PCB 1016	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j
PCB 1221	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j
PCB 1232	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j
PCB 1242	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j
PCB 1248	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j
PCB 1254	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j
PCB 1260	< .13 j	< .13 j	< .13 dj	< .13 j	< .13 j

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name: Depth (feet): Sample Date:	MW16 12 01/26/94	MW17 14 01/29/94	MW17-DUP 14 01/29/94	MW24 14 01/30/94	SMBKGMW006 9 02/05/94
Analytes					
Pesticides/PCBs					
Toxaphene	< .6 J	< .6 J	< .6 DJ	< .6 J	< .6 J
alpha-Benzenhexachloride	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
alpha-Chlordane	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
alpha-Endosulfan/Endosulfan I	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
beta-Benzenhexachloride	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
beta-Endosulfan/Endosulfan II	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
delta-Benzenhexachloride	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
gamma-Chlordane	< .005 J	< .005 J	< .005 DJ	< .005 J	< .005 J
Herbicides					
2,4-D / 2,4-Dichlorophenoxyacetic acid	< .1 J	< .1 J	< .1 DJ	< .1 J	< .1
2,4-DB / 4-(2,4-Dichlorophenoxy)butyric acid	< .1	< .1	< .1 D	< .1	< .1
245T	< .1	< .1	< .1 D	< .1	< .1
245TP	< .1	< .1	< .1 D	< .1	< .1
Dalapon	< .1	< .1	< .1 D	< .1	< .1
Dicamba	< .1	< .1	< .1 D	< .1	< .1
Dichloroprop	< .1	< .1	< .1 D	< .1	< .1
Dinoseb	< .1	< .1	< .1 D	< .1	< .1
MCPA	< 3	< 3	< 3 D	< 3	< 3
MCPB	< 3	< 3	< 3 D	< 3	< 3

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1



Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name:	MW16	MW17	MW17-DUP	MW24	SMBKGMW006
Depth (feet):	12	14	14	14	9
Sample Date:	01/26/94	01/29/94	01/29/94	01/30/94	02/05/94
-----					
Analytes					
-----					
Metals					
Aluminum	1580	9110	3350 D	10400	17900
Aluminum (Filtered)	< 40 F	< 40 F	< 40 DF	< 40 F	< 40 F
Antimony	< 3 J	< 3 J	< 3 Dj	< 3	< 3
Antimony (Filtered)	< 3 Fj	< 3 Frr	< 3 DFrr	< 3 F	< 3 F
Arsenic	4.6	2.6	< 2.5 D	9.2	17.3
Arsenic (Filtered)	< 2.5 F	< 2.5 F	< 2.5 DF	< 2.5 F	< 2.5 F
Barium	46.6	202	166 D	154	243
Barium (Filtered)	102 F	147 F	142 DF	80.1 F	126 F
Beryllium	< 5 /J	< 5 /J	< 5 D/J	< 5 /J	< 5
Beryllium (Filtered)	< 5 F/J	< 5 F/J	< 5 DF/J	< 5 F/J	< 5 F
Boron	< 50	158	145 D	< 50	73.1
Cadmium	< 5	< 5	< 5 D	< 5	< 5
Cadmium (Filtered)	< 5 F	< 5 F	< 5 DF	< 5 F	< 5 F
Calcium	43000	141000	132000 D	150000	192000
Calcium (Filtered)	116000 F	127000 F	123000 DF	89100 F	91600 F
Chromium	< 10	11.7	< 10 D	29.1	34.3
Chromium (Filtered)	< 10 F	< 10 F	< 10 DF	< 10 F	< 10 F
Cobalt	< 20	< 20	< 20 D	< 20	< 20

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name:	MW16	MW17	MW17-DUP	MW24	SMBKGMW000
Depth (feet):	12	14	14	14	9
Sample Date:	01/26/94	01/29/94	01/29/94	01/30/94	02/05/94
Analytes					
-----					
Metals					
Cobalt (Filtered)	< 20 F	< 20 F	< 20 DF	< 20 F	< 20 F
Copper	< 5	5.41	5.06 D	18.7	39.5
Copper (Filtered)	< 5 F	< 5 F	< 5 DF	< 5 F	< 5 F
Cyanide	< 2.5 /J	< 2.5	< 2.5 D	< 2.5	< 2.5 J
Iron	2390	6980	5070 D	19500	30800
Iron (Filtered)	< 45 F	48.8 F	49.8 DF	< 45 F	< 45 F
Lead	7.2 b	2.9 b	< 2 D	10.5 J	17.6 J
Lead (Filtered)	< 2 F	< 2 F	< 2 DF	< 2 Fj	< 2 Fj
Magnesium	15600	54000	51100 D	53800	59500
Magnesium (Filtered)	45300 F	50400 F	49200 DF	38100 F	35400 F
Manganese	60.6	694	631 D	393	919 B
Manganese (Filtered)	5.87 F	595 F	571 DF	29.9 F	233 FB
Mercury	< .2	< .2	< .2 D	< .2	< .2
Mercury (Filtered)	NA	NA	NA	NA	< .2 F
Nickel	< 15	< 15	< 15 D	25.4	37.4
Nickel (Filtered)	< 15 F	< 15 F	< 15 DF	< 15 F	< 15 F
Potassium	745	3730	1720 D	3360	12000
Potassium (Filtered)	1430 F	765 F	709 DF	< 550 F	7440 F

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
 Samples Collected from Monitoring Wells  
 MW16, MW17, MW24, and SMBKGMW006

Sample Name:	MW16	MW17	MW17-DUP	MW24	SMBKGMW006
Depth (feet):	12	14	14	14	9
Sample Date:	01/26/94	01/29/94	01/29/94	01/30/94	02/05/94
Analytes					
-----					
<b>Metals</b>					
Selenium	< 2.5 J	< 2.5 J	< 2.5 DJ	< 2.5 J	< 2.5 J
Selenium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 FDj	< 2.5 Fj	< 2.5 Fj
Silver	< 5	< 5	< 5 D	< 5	< 5
Silver (Filtered)	< 5 F	< 5 F	< 5 DF	< 5 F	< 5 F
Sodium	6670	33400	31900 D	5540	44200
Sodium (Filtered)	20400 F	33800 F	32700 DF	5790 F	42500 F
Thallium	< 2.5 J	< 2.5 J	< 2.5 DJ	< 2.5 J	< 2.5 J
Thallium (Filtered)	< 2.5 Fj	< 2.5 Fj	< 2.5 FDj	< 2.5 Fj	< 2.5 Fj
Vanadium	< 10 /J	13.6 /J	< 10 D/J	22.5 /J	36.7
Vanadium (Filtered)	< 10 F/J	< 10 F/J	< 10 DF/J	< 10 F/J	< 10 F
Zinc	< 20	20.3	< 20 D	53.3	89.8
Zinc (Filtered)	< 20 F	50.9 F	< 20 DF	< 20 F	< 20 F
<b>Landfill Parameters</b>					
Alkalinity	340000 J	410000 J	420000 DJ	420000 J	370000 J
Ammonia	< 50	< 50	< 50 D	< 50 J	< 50 J
Biological oxygen demand	< 1000 J	< 1000 rr	< 1000 Drr	< 1000 J	2000 J
Chemical oxygen demand	< 5000 J	< 5000 J	< 5000 DJ	41000 J	29000 J
Chloride	200000	100000	100000 D	2300 b	100000
Fluoride	< 500 rr	< 500 rr	< 500 Drr	< 500 rr	< 500

Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

Table D10: Summary of Analytical Results for Groundwater  
Samples Collected from Monitoring Wells  
MW16, MW17, MW24, and SMBKGMW006

Sample Name:	MW16	MW17	MW17-DUP	MW24	SMBKGMW006
Depth (feet):	12	14	14	14	9
Sample Date:	01/26/94	01/29/94	01/29/94	01/30/94	02/05/94
<b>Analytes</b>					
-----					
<b>Landfill Parameters</b>					
Nitrite, Nitrate -- Non-Specific	< 20	< 20	< 20	23.8	< 20
Sulfate	58000	49000	49000	68000	41000
Total Organic Carbon	1900 bj	2900 j	3400 DJ	2400 J	4100 j
Total dissolved solids	640000 j	690000 j	660000 DJ	470000 j	520000 j
Total recoverable phenolics	< 2	2.74 b	2.18 Db	< 2	3.92 b

-----  
Note: Results are reported in micrograms per liter (ug/l)

NA -- not analyzed

< -- less than

Data Qualifiers are defined in Table C1

**Appendix E**

**ANALYTICAL DATA QUALITY ASSESSMENT**

## **INTRODUCTION**

This appendix describes and presents the results of an evaluation of Fort Benjamin Harrison (FBH) analytical data quality based on data validation of the analytical results, the U.S. Army Environmental Center's (USAEC's) review of the control charts produced by the analytical laboratories, and a summary of the precision, accuracy, representativeness, completeness, and comparability (PARCC) parameters. This evaluation was used to assess whether the data quality objectives (DQOs) established for the FBH Resource Conservation and Recovery Act Facility Investigation and Environmental Investigation (RFI/EI) Work Plan (HLA, 1993b) were satisfied.

During the Phase I FBH field investigation, six sites were classified as EI Sites (EI Sites 1 through 6). All remaining sites were investigated as RFI Sites. For this discussion of data validation and data quality, the acronym EI refers to EI Sites 1 through 6. RFI refers to the remaining sites investigated during the Phase I field program. Detailed data validation with subsequent qualification of analytical results was performed on the background and site analytical results with the exception of analytical results for EI Sites 1 through 6. However, it is assumed that the findings of HLA's detailed validation can be applied in general terms to the EI Sites 1 through 6 data which represents only 12.3 percent of the FBH analytical data. In addition, the USAEC's control chart review includes both RFI and EI data. Therefore, the data quality assessment discussed in this appendix relates to the FBH analytical data as a whole.

## **ANALYTICAL METHODS**

The FBH RFI/EI investigative and background samples of soil, groundwater, surface water, and sediment were collected during the period of November 1993 to April 1994. HLA submitted these samples for analysis to Environmental Science and Engineering, Inc. (ESE) of Gainesville, Florida. Dioxin/furan samples were analyzed by Enseco California Analytical Laboratory (Enseco) of West Sacramento, California. The samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs), herbicides, landfill parameters, total petroleum hydrocarbons (TPH), polychlorinated dioxins and furans, metals, and

## Appendix E

cyanide under the USAEC Quality Assurance Program (QAP) (USAEC, 1993) protocol. The analytical methods are summarized in Table E1 by medium. The analytical methods used were either USAEC-approved methods or standard U.S. Environmental Protection Agency (EPA) methods.

### DATA VALIDATION

HLA validated twenty percent of the EI analytical results using procedures that follow USAEC Standard Operating Procedure Chem-012. (EI samples are designated with sample identification numbers with EI.) Additional information regarding the data validation of the EI analytical results is provided in the FBH QAPP (HLA, 1993b). Data validation of the EI analytical results involved checking data packages for accuracy and completeness and noting comments on an EI data validation summary form. HLA did not qualify the EI analytical results to indicate possible problems but instead summarized EI data validation results in summary reports.

HLA validated one hundred percent of the RFI analytical results as requested by the EPA Region V. (RFI samples are designated with sample identification numbers beginning with SM. Previously existing monitoring wells designated with sample identification numbers beginning with MW were also sampled.) As indicated in the FBH QAPP, RFI organic analyses results were validated following the general approach presented in the EPA's National Functional Guidelines for Organic Data Review (EPA, 1991d). RFI inorganic analyses results were validated following the general approach presented in EPA's Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses (EPA, 1988). The data validation approach presented in these documents includes criteria for the review of holding times, instrument performance checks, initial and continuing calibrations, blanks, laboratory control sample analyses, matrix spikes, and overall assessment of the analytical results. Following these guidelines, data qualifiers were added to analytical results to indicate that problems were noted during the data validation.

To maintain consistency during the RFI data validation effort, HLA developed data validation criteria outlines and data validation summary forms for the respective analytical method Standard Operating Procedures the laboratory followed for the analysis of FBH samples. HLA data validators used the information provided in the data validation criteria outlines to assess whether QC criteria were met by the laboratory. Observations from the data review were recorded on the data validation summary forms.

During the RFI data validation, HLA qualified analytical results using the following flags: j, b, and rr.

The flags were used to indicate the following:

- j      Estimated value - used when EPA's functional guidelines (EPA, 1988; 1991d) specify the value or reporting limit is estimated
- b      Undetected due to blank contamination - used when the sample result is less than 5 times (10 times for common laboratory contaminants) the associated blank result and, therefore, is not considered a detection.
- rr     Rejected value - used when the EPA's functional guidelines specify that an analytical result is unusable.

A summary of the FBH RFI investigative analytical data qualified based on data validation results is presented in Table E2. The analytical group with the highest percentage qualified data is the landfill parameter data with 14.7 percent qualified b, 41.7 percent qualified j, and 7.3 percent qualified rr. Overall, 0.7 percent of the data were qualified b, 11.9 percent of the data were qualified j, and 1.6 percent of the data were qualified rr.

### **Control Chart Review**

This section provides a summary of the control charts reviewed for the FBH data. Control charts for 533 lots were submitted to USAEC for review. Control charts were not submitted for the following analyses: total dissolved solids, pH, biological oxygen demand, alkalinity, hardness, chemical oxygen demand, total organic carbon, and dioxins/furans. Replicate laboratory control samples and surrogate compound recoveries are compiled on the control charts. Under Version 5.0 of the Installation Restoration Data Management Information System (IRDMIS) validation system, USAEC has reviewed and



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approved the replicate laboratory control samples and surrogate compound data for FBH analytical data. A summary of the control chart review process is included in the USAEC QAP (USAEC, 1993).

The USAEC-suggested data qualifiers are summarized in Table E3. The USAEC assigned qualifiers to 2.2 percent of the total investigative sample results. The results of USAEC's control chart review indicate that control analytes used to track and evaluate the precision and accuracy of the analytical methods were within acceptable limits.

### DATA QUALITY

HLA reviewed the FBH RFI/EI analytical data to assess the quality of the data with respect to PARCC parameters (EPA, 1987). The results of these assessments for each review parameter are presented in the following subsections.

#### Precision Evaluation

Precision is a measure of the reproducibility of a set of analytical results. The precision of environmental analytical results is influenced by sample matrix heterogeneity, sampling procedures, and laboratory analysis. The precision of the FBH RFI/EI analytical results was evaluated by comparing the relative percent differences (RPDs) between detected target analytes in field duplicates, replicate laboratory control samples, and matrix spike/matrix spike duplicates (MS/MSDs).

The RPD was calculated for detected analytes using the following equation:

$$RPD = \frac{|x-y|}{[(x+y)/2]} * 100$$

where:

x = original sample datum

y = duplicate sample datum

The procedure used for evaluating the precision of the FBH RFI/EI duplicate analytical results follows.

1. Identify the duplicate samples.
2. Calculate the RPD values for analytes detected in both analyses of the duplicate sample pair.
3. Compare the average group RPD to the DQO goal for precision.

The magnitude of the RPD value provides a relative measure of precision, i.e., a value near zero indicates a precise analytical method and/or sampling technique and a more homogeneous sample matrix. The historical precision results for ESE's performance evaluation samples were used to establish the precision DQO for the FBH RFI/EI analytical results. A summary of the average RPD goals for analyses performed at ESE are presented in Appendix G of the QAPP (HLA, 1993b) and in Tables E4 and E5.

### **Field Duplicate Samples**

Field duplicate samples are replicate samples collected in the field and analyzed to provide a measure of the total variability introduced by sample matrix heterogeneity, field sampling techniques, and laboratory analytical methods. Field duplicate precision was evaluated by calculating the RPD only for target analytes detected in both field duplicate samples.

### **Laboratory Control Samples**

The analysis of replicate laboratory control samples is required by the USAEC quality assurance/quality control (QA/QC) program to monitor the precision of analytical methods (USAEC, 1993). Laboratory control samples are prepared by adding project- and method-specific target analytes (called control analytes) to two or more aliquots of a Rocky Mountain Arsenal standard soil or American Society for Testing and Materials Type I or Type II water, depending upon the specific analysis being performed. Laboratory control samples are analyzed with each sample lot to monitor laboratory precision. The RPD is calculated for each target analyte added to the standard matrix. Laboratory control samples are prepared from a standard matrix to provide a reproducible yet realistic matrix effect for monitoring the ability of the laboratories to generate reproducible analytical results.

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The control samples are analyzed with each lot of investigative samples, and the recoveries of the control analytes are measured. These replicate standard matrix spikes were included as QC samples for the metals, cyanide, TPH, OCPs/PCBs, herbicides, and landfill parameters. Analyses for VOCs, SVOCs, and dioxins/furans use method-specific surrogate compounds added to each replicate sample rather than replicate laboratory control samples to monitor method performance.

### **Results of Field and Laboratory Duplicate Samples**

The average group RPD values calculated for field and laboratory duplicate samples for soil and water samples are summarized in Table E4. The RPD goals are also shown in Table E4. The RPD goals represent ESE's historical precision for performance evaluation samples. The two values listed for RPD goals in Tables E4 and E5 represent the range of RPD values for the different target analytes for a particular method. An RPD goal was not available for dioxins. Group RPDs for field duplicate samples were not calculated for herbicides and OCPs/PCBs (water) because target analytes from these groups and matrices were not detected in field duplicate samples. In addition, water field duplicate samples and laboratory duplicate samples were not analyzed for dioxin/furans.

Table E4 also presents the average sample RPD by group. This number is calculated by subtracting the laboratory control RPD from the field duplicate RPD. Because the laboratory control sample RPD represents the precision of the analytical method, subtracting it from the field duplicate RPD (which represents both sample and analytical precision) provides a measure of the sample precision. Sample precision represents matrix heterogeneity and field sampling precision independent of laboratory and method precision.

For soil field duplicate samples, the average group RPD met the RPD goal for all groups except OCPs/PCBs. Because the average sample RPD for OCPs/PCBs is also above the RPD goals, it appears that the sample matrix heterogeneity contributed to imprecision within the FBH OCP/PCB field duplicate data. Average group RPDs for water field duplicate samples met the RPD goals for all groups except

VOCs; however, the average group RPD for VOCs (14.3 percent) was only slightly above the RPD goal of 14 percent. Average group RPDs for soil and water laboratory control samples met the RPD goals for all groups.

The RPDs for the field duplicate samples were elevated with respect to the laboratory control sample RPDs. Typically, sample matrix heterogeneity and sampling variability are greater than analytical variability, as supported by the average sample RPD data presented in Table E4. Average sample RPD values, with the exception of VOCs in soil, were approximately 2 to 11 times higher than corresponding laboratory control sample RPD values.

#### **Matrix Spike/Matrix Spike Duplicates**

MS/MSDs are laboratory replicates of investigative samples that have been spiked with control analytes. These samples were analyzed at a frequency of 1 per 20 investigative samples to provide a measure of the total variability introduced by sample matrix heterogeneity and laboratory analytical methods. MS/MSD precision was evaluated by calculating the RPD for target analytes and surrogate spike compounds detected in both samples.

MS/MSD RPDs are summarized in Table E5. The average group RPD for the analyte groups for both soil and water were below the RPD goals. Therefore, the precision DQO for MS/MSDs was met.

#### **Accuracy Evaluation**

Accuracy represents a measure of the nearness of an analytical result to its actual concentration. Factors that affect the accuracy of analytical data include the introduction of contaminants into the sample matrix in the field or laboratory, analytical interferences caused by the matrix sampled, and problems with the analytical method. Accuracy of the FBH RFI/EI analytical results was evaluated by reviewing QC blanks for contamination, target analyte recoveries from MS/MSD samples, and surrogate recoveries for investigative samples.

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### Review of QC Blanks

Analytical data from the analysis of QC blanks were reviewed to evaluate the accuracy of the investigative analytical data. QC blanks included trip blanks, rinse blanks, and method blanks as follows:

- Trip blanks are laboratory samples of analyte-free water included in the transport container used to ship water samples requiring VOC analysis. Trip blanks are shipped to the field, packaged with the investigative samples, and shipped unopened to the laboratory. Trip blanks are analyzed for VOCs only and indicate the type and level of VOC contamination, if any, introduced by the sample bottles and during sample shipment from the field and storage at the laboratory.
- Rinse blanks are samples prepared in the field by pouring distilled water into or over the appropriate sample collection device following decontamination, collecting the rinsate, and analyzing it for the same parameters for which the original investigative sample was analyzed. Rinse blank data may be used to identify contaminants present due to insufficient decontamination of sampling equipment.
- Method blanks are samples prepared in the laboratory using analyte-free water and are included in the entire analytical procedure to assess possible contamination during sample preparation and analysis. Method blanks contain all of the method-required control analytes as specified by USAEC and are analyzed with each lot of samples.

The QC blank data were evaluated to assess the accuracy of the analytical data using the following procedure:

1. Separate the QC blank analytical data into groups by blank type.
2. Tabulate the detections of target analytes in QC blanks.
3. Compare the QC blank data with the corresponding investigative sample results.

Acetone at a concentration of 13 micrograms per liter ( $\mu\text{g/l}$ ) was detected in 1 of the 56 FBH RFI/EI trip blanks. However, because acetone was not detected in the associated investigative samples, no impact on sample results is anticipated. No other target analytes were detected in FBH RFI/EI trip blanks.

Target analytes were detected in 39 of the 62 FBH RFI/EI rinse blanks. A summary of the 23 target analytes detected and their ranges of concentrations are presented in Table E6. Samples of the source water that was used for rinse blanks were also analyzed, and a summary of the source water sample concentrations for compounds that were detected in rinse blanks is also presented in Table E6.

Seven organic target analytes were detected in rinse blanks. Three of these analytes (acetone, bis(2ethylhexyl)phthalate, and di-N-octyl-phthalate) are common laboratory contaminants and were detected at relatively low concentrations. Two of the analytes (2-cyclohexen-1-one and diacetone alcohol) are tentatively identified compounds (TICs) that were also detected at relatively low concentrations (5 and 6  $\mu\text{g/l}$ , respectively). These TICs were not detected in associated investigative samples. The remaining two organic target analytes (bromodichloromethane and chloroform) were detected in the rinse blanks at concentrations below or approximately equal to the highest concentration detected in the source water samples.

The remaining 16 target analytes or parameters detected in rinse blank samples were metals or inorganic parameters including alkalinity, aluminum, ammonia, antimony, boron, calcium, copper, iron, lead, magnesium, manganese, nitrite-nitrate (nonspecific), sodium, total organic carbon, total hardness, and zinc. A comparison of the rinse blank concentrations to concentrations detected in the source water indicates that the primary source of these analytes appears to have been the source water used for rinsing and not the rinsed sampling equipment. The rinse water used was deionized water from a local commercial supplier. Water of this type often contains residual low level concentrations of naturally occurring analytes, such as the detected metals and inorganic parameters. For these reasons, rinse blank results were assessed to have minimal impact on investigative sample results.

Method blanks were analyzed with each of the sample lots associated with the FBH RFI/EI. Target analytes were detected in 124 of the 692 method blanks that were analyzed. A summary of the 51 of target analytes detected is presented in Table E7. As discussed in the Data Validation section of this appendix, method blank results were reviewed with associated investigative sample results. Investigative sample results that were considered to be due to method blank contamination were qualified as "undetected due to blank contamination" and represent approximately 0.7 percent of the RFI analytical data. A more complete description of the method blank evaluation and the percent of data that was affected is presented above in the Data Validation section of this appendix.

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### **Review of Matrix Spike Samples**

For the MS/MSD samples, target analytes were spiked into the natural sample matrices, and the percent recovery of the spike quantity was evaluated. MS/MSD samples were collected to evaluate accuracy. The percent recovery range goals and the calculated percent recoveries for the MS/MSD samples are summarized by analytical method in Tables E8 through E14. The percent recovery goals were derived from ESE's historical results for standard matrix samples. Therefore, these recovery goals do not represent the actual matrices encountered at FBH.

For the VOCs, SVOCs, OCPs/PCBs, dioxins and furans and the landfill parameters (see Tables E8, E9, E10, E12, and E14, respectively), the mean percent recoveries for MS/MSD spiked compounds are within the percent recovery goals. For some spiked compounds the minimum and maximum percent recoveries are outside of the goals. In general, percent recoveries were outside of the goals for soil samples more often than for water samples. This was expected because soil samples typically have stronger matrix effects than water samples.

The mean percent recoveries for MS/MSD spiked metals (Table E13) are within the recovery range goals except for calcium, copper, and selenium in soil MS/MSDs. The average percent recoveries for calcium and copper are above the recovery goals, and the average percent recovery for selenium is below the percent recovery goals. Both calcium and copper have some anomalously high percent recoveries in some samples, which have probably skewed the average percent recoveries for these metals. The low average percent recovery for selenium appears to be due to a matrix effect because the average laboratory control sample (daily high spike) recovery is within control limits.

The mean percent recoveries for herbicides (Table E11) are below the percent recovery range goals for four target analytes in soil MS/MSDs (2,4-DB; dichloroprop; 2,4,5-T; 2,4,5-TP) and two target analytes in water MS/MSDs (2,4-DB and dichloroprop). The recoveries of 2,4,5-T and 2,4,5-TP in soil MS/MSDs are only slightly below the percent recovery range goals. Average laboratory control sample recovery data for

these compounds are within percent recovery range goals. This may indicate that a soil matrix effect is causing low recovery of 2,4,5-T and 2,4,5-TP; however, the impact of this matrix effect appears to be minimal, and the data for 2,4,5-T and 2,4,5-TP are considered acceptable.

Average percent recoveries for 2,4-DB and dichloroprop in soil and water MS/MSDs are well below the percent recovery range goals 84 to 102 and 91 to 103, respectively. The average laboratory control sample recoveries of these compounds are also well below the percent recovery range goals. However, the MS/MSD and laboratory control sample average recoveries are comparable to average percent recoveries observed for other herbicide spike compounds (60 to 80 percent).

The laboratory percent recovery range goals are derived from the daily high spike recoveries. These goals are updated periodically by the laboratory. The laboratory was consulted for more current percent recovery goals to assess if the ranges given at the beginning of the project for 2,4-DB and dichloroprop are representative of the ranges observed during analysis of the project samples. The average MS/MSD and laboratory control sample percent recoveries are within the ranges supplied by the laboratory dated March 24, 1994 (2,4-DB ranges are 56.6 to 84.0 percent for soil and 69.8 to 93.4 percent for water; dichloroprop ranges are 50.1 to 82.1 percent for soil and 59.2 to 85.2 percent for water). These updated and more current percent recovery ranges are considered to be more appropriate for evaluating the MS/MSD results for 2,4-DB and dichloroprop than the ranges for 2,4-DB and dichloroprop found in the QAPP (HLA, 1993b). Therefore, although the MS/MSD and laboratory control sample average percent recoveries did not meet the percent recovery goals listed in Table E11, they are considered acceptable because they are comparable to other herbicide spike recoveries and they are within the March 24, 1994, laboratory percent recovery ranges.

### **Review of Surrogate Recoveries**

Surrogate spike recoveries and recovery goals are also summarized in Tables E8 through E11. Surrogate compounds are compounds that are similar to target analytes in chemical composition and behavior but



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which are not normally found in environmental samples. The accuracy of an analytical data set is assessed by calculating the percent recovery of the spiked surrogate compound in investigative samples and comparing the calculated percent recovery to the percent recovery goals.

The mean surrogate percent recoveries were within the percent recovery goals for VOCs, SVOCs, and herbicides. The mean percent recovery for one of the two OCP/PCB surrogates in the water samples was slightly outside of the recovery goals. The minimum and maximum percent recoveries were outside of the goals for five surrogate compounds (3 for OCP/PCB, 1 for VOCs, and 1 for SVOCs). As discussed in HLA's letter to USAEC on February 1, 1994, entitled "Data Validation Results," investigative sample results that had surrogate recoveries outside of the percent recovery goals were qualified as estimated. Data qualified as estimated is discussed in the Data Validation section of this appendix.

### **Representativeness Evaluation**

Representativeness refers to how well sample data accurately and precisely represent environmental conditions at the site. Factors that may affect representativeness include the location of sampling sites and the procedures used to collect samples. It is important to select representative sampling sites to ensure that the medium sampled is typical of site conditions. Correct sample collection procedures are important to ensure that the introduction of contaminants into the sample is minimized.

### **Sampling Site Location**

The FBH RFI/EI sampling sites were specified in the USAEC Task Order issued to HLA to perform the FBH RFI/EI. Representative sample locations within the specified sites were selected partially on the basis of historical information (HLA, 1993b). The sites were examined during site visits, and areas potentially contaminated based on soil discoloration, site activity, or receptors near discharge points were also identified for sample collection. Soil-gas screening was also used in areas of suspected subsurface soil VOC contamination to assist in selection of sampling locations. The data gathered from the historical information review, site visits, and screening procedures provided sufficient information for the selection of representative sample collection sites (HLA, 1993b).

### Sample Collection

The representativeness evaluation included a review of the sample collection procedures used during the FBH sampling events. Surface soil, subsurface soil, sediment, surface water, and groundwater samples were collected using techniques reviewed and approved by USAEC and EPA (HLA, 1993b). QC procedures implemented during sample collection included collecting trip and rinse blanks and using proper sample containers and sample preservation techniques. The sample collection procedures used ensured the collection of representative samples and therefore the representativeness DQO was met.

### Completeness Evaluation

Analytical completeness is defined as the percentage of analytical results considered to be valid compared to the total number of analytical results. Valid chemical data are values that have been identified as acceptable or acceptable as qualified. Percent completeness for the FBH analytical data was calculated using the following equation:

$$\text{Analytical Completeness (\%)} = \frac{\text{number of valid results for each parameter analyzed}}{\text{total number of samples collected for each parameter analyzed}} \times 100$$

To assess analytical completeness, the FBH analytical data were reviewed for values qualified unusable on the basis of the data validation. Of the 64,881 separate analytical results, 948 or 1.6 percent were evaluated as unusable and were qualified with "rr" through the data validation process (Table E2).

Therefore, completeness for the FBH analytical data was greater than 98.4 percent which exceeds the FBH DQO goal for completeness (HLA, 1993b) of 80 percent. Analytical completeness for the different analytical groups ranged from 92.7 percent for landfill parameters to 100 percent for SVOCs and dioxin/furans.

Field completeness is a measure of the actual number of samples collected for laboratory analysis versus the number that was proposed. To assess field completeness the following calculation was used:

$$\text{Field Completeness (\%)} = \frac{\text{the actual number of samples collected for laboratory analysis}}{\text{the number of samples proposed to be collected for laboratory analysis}} \times 100$$

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A summary of field completeness by sample type and location is presented in Table E15. The overall field completeness was 104 percent which exceeds the FBH DQO goal of 80 percent. The field completeness by sample type ranges from 100 to 107 percent and by sample location ranges from 94 to 140 percent.

### **Comparability Evaluation**

Comparability is a qualitative assessment of how well one data set compares to another. Factors that may affect the comparability of data include uniformity of sampling activities, analytical procedures, and methods of reporting analytical results. For this review, comparability of the data was assessed by reviewing the FBH methods of sample collection and analysis, and reporting of analytical data (HLA, 1993b).

Sample collection activities conducted at FBH were in compliance with USAEC and EPA guidelines and methods for field operations. Sample analyses were conducted using USAEC-approved laboratories. A single laboratory, ESE, performed all sample analyses except for dioxin analyses which were performed by Enseco. Therefore, the comparability DQO was met.

### **SUMMARY**

The FBH analytical chemistry data quality assessment consisted of evaluating the data with respect to HLA's data validation, USAEC's control chart review, and the PARCC parameters. Results of these evaluations indicate that the FBH analytical data are of known and acceptable quality and meet the DQOs for the project with the exceptions noted below.

- The precision of the analytical data was acceptable based on the RPD values from duplicate samples with the exception of OCPs/PCBs in soil field duplicates. Problems with OCP/PCB RPD values appeared to be due to matrix heterogeneity. Overall, the precision of the data was acceptable.
- The accuracy of the analytical data was acceptable based on the blank sample results, the MS percent recovery results, and the surrogate percent recovery results. Some target analytes were detected in rinse blank samples; however, the primary source of these analytes appears to be the source water used for rinsing and not the rinsed sampling equipment. Target analytes were also detected in method blank samples. As per the data validation protocol, detections that are

considered to be due to method blank contamination were qualified b and represent 0.7 percent of the RFI analytical data. A review of the MS/MSD recoveries indicates that some of the quantitative results for selenium, calcium, and copper have been influenced by matrix effects. Average surrogate recoveries for OCP/PCBs were below QC limits for one of two OCP/PCB surrogate compounds in the water samples. This indicates that the OCP/PCB water data are less reliable quantitatively than the soil data. Overall, however, the accuracy of the data was acceptable.

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**Table E1: Fort Benjamin Harrison RCRA Facility Investigation and Environmental Investigation  
Laboratory Analytical Methods**

Analyte	USAEC Method Numbers		Reference Analytical Method	Method Approval Required	Associated EPA Sample Preparation Methods		EPA Sample Cleanup Method	
	Soil	Water			Soil <sup>a</sup>	Water <sup>a</sup>	Soil <sup>a</sup>	Water <sup>a</sup>
Volatile organic compounds (VOCs)	VMS1-SO and VMS2-SO	VMS1-WA and VMS2-WA	8240 <sup>a</sup>	Yes	8240	8240	-	-
Semivolatile organic compounds (SVOCs)	SMV1-SO	SMV1-WA	8270 <sup>a</sup>	Yes	3540	3510	3640	3640
Dioxins/furans	-	-	8290 <sup>a</sup>	No	8290	8290	8290	8290
Pesticides/polychlorinated biphenyls (PCBs)	PST1-SO	PST1-WA	8080 <sup>a</sup>	Yes	3540	3510	3640	3640
Herbicides	HBG1-SO	HBG1-WA	8150 <sup>a</sup>	Yes	8150	8150	8150	8150
Phenols	-	-	8040 <sup>a</sup>	Yes	3540	3510	3650	3650
Cyanide	CYN1-SO	CYN1-WA	9012 <sup>a</sup>	Yes	-	-	-	-
Metals	ICP1-SO	ICP1-WA	6010 <sup>a</sup>	Yes	3050	3005	-	-
Antimony	-	GSB1-WA	7041 <sup>a</sup>	Yes	3050	3005	-	-
Arsenic	GAS1-SO	GAS1-WA	7060 <sup>a</sup>	Yes	3050	7060	-	-
Lead	GPB1-SO	GPB1-WA	7421 <sup>a</sup>	Yes	3050	3005	-	-
Mercury	-	HGC1-WA	7470 <sup>a,c</sup>	Yes	-	7470	-	-
Mercury	HGC1-SO	-	7471 <sup>a,d</sup>	Yes	7471	-	-	-
Selenium	GSE1-SO	GSE1-WA	7740 <sup>a</sup>	Yes	3050	7740	-	-
Thallium	GTL1-SO	GTL1-WA	7841 <sup>a</sup>	Yes	3050	3005	-	-
Total petroleum hydrocarbons (TPH)	TPH1-SO	TPH1-WA	Modified 8015	Yes	-	-	-	-
Landfill Parameters								
Alkalinity	-	-	310.1 <sup>b</sup>	No	-	-	-	-
Ammonia	ANA1-SO	-	350.1 <sup>b</sup>	Yes	-	-	-	-
Biochemical oxygen demand (BOD)	-	-	405.1 <sup>b</sup>	No	-	-	-	-
Boron	-	-	6010 <sup>a</sup>	Yes	-	-	-	-
Chemical oxygen demand (COD)	-	-	410.4 <sup>b</sup>	No	-	-	-	-
Chloride	ANI1-SO	ANI1-WA	300.0 <sup>b</sup>	Yes	-	-	-	-
Fluoride	ANI1-SO	ANI1-WA	300.0 <sup>b</sup>	Yes	-	-	-	-
Hardness	-	-	130.2 <sup>b</sup>	No	-	-	-	-
Nitrate	ANA2-SO	ANA2-WA	353.2 <sup>b</sup>	Yes	-	-	-	-
pH	-	-	150.1 <sup>b,c</sup>	No	-	-	-	-
pH	-	-	9045 <sup>b,d</sup>	-	-	-	-	-
Specific conductivity	-	-	120.1 <sup>b</sup>	No	-	-	-	-
Sulfate	ANI1-SO	ANI1-WA	300.0 <sup>b</sup>	Yes	-	-	-	-
Total dissolved solids (TDS)	-	-	160.1 <sup>b</sup>	No	-	-	-	-
Total organic carbon (TOC)	-	-	9060 <sup>b,d</sup>	No	-	-	-	-
Total organic carbon (TOC)	-	-	415.1 <sup>b,e</sup>	No	-	-	-	-
Total phenolic compounds	TPT1-SO	TPT1-WA	9066 <sup>a</sup>	No	-	-	-	-

**Table E1 (continued)**

EPA USAEC	U.S. Environmental Protection Agency
	U.S. Army Environmental Center
a.	Test Methods for Evaluating Solid Waste/Chemical Methods, U.S. EPA, SW-846, Third Edition, 1986.
b.	Methods of Chemical Analysis of Water and Wastes, U.S. EPA, 1983.
c.	Aqueous method.
d.	Soil/sediment method.

**Table E2: Summary of Qualified Investigative Analytical Data**

Type of Analysis	Percent Qualified			Percent Unqualified	Percent Complete
	b	j	rr		
Volatile Organic Compounds	0.3	5.4	2.4	91.9	97.6
Semivolatile Organic Compounds	0.5	6.9	0.005	92.6	100.0
OCPs/PCBs	0.03	19.1	2.5	78.3	97.5
Herbicides	0.3	5.2	3.1	91.3	96.9
Dioxins/furans	0.0	10.4	0.0	94.0	100.0
Metals	0.4	18.3	2.6	78.9	97.4
Landfill Parameters	14.7	41.7	7.3	42.5	92.7
Overall	0.7	11.9	1.6	86.0	98.4

b Undetected due to blank contamination  
 j Estimated value  
 OCPs/PCBs Organochlorine pesticides/polychlorinated biphenyls  
 rr Rejected value; data are unusable

Some data are qualified with "b" and "j". Therefore, the sum of the percent qualified and the percent unqualified does not always equal 100 percent.



**Table E3: Summary of USAEC Qualified Investigative Results**

USAEC Qualifier	Total number of Investigative Results Per Qualifier	Percent of Total of Investigative Results per Qualifier
I	333	0.51
IM	2	0.003
IR	30	0.05
J	224	0.35
JN	167	0.26
JR	50	0.08
M	476	0.73
N	125	0.19
NJ	<u>20</u>	<u>0.03</u>
Total	1427	2.20

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I The low-spike recovery is high.  
 J The low-spike recovery is low.  
 M The high-spike recovery is high.  
 N The high-spike recovery is low.  
 R Data is rejected and is not usable.  
 USAEC U.S. Army Environmental Center

**Table E4: Relative Percent Difference Summary for Duplicate Soil and Water Samples**

Matrix	Analyte Group	Field Samples				Laboratory Control Samples <sup>a</sup>					
		No. of Sample Pairs	No. of Pairs of Analyte Detections	Maximum RPD	Average Group RPD	No. of Sample Pairs	No. of Pairs of Analyte Detections	Maximum RPD	Average Group RPD	Average Sample RPD	RPD <sup>c</sup> Goals
Soil	VOCs	21	8	44.4	6.0	32	96	13.6	3.5	2.5	21 to 24
	SVOCs	27	33	148	36.6	28	168	54.8	8.0	28.6	19 to 50
	OCs/PCBs	29	7	199	115	54	140	164	10.0	105.0	3.7 to 59
	Herbicides	24	0	NA	NA	25	166	81.6	11.9	NA	30 to 55
	Dioxins	3	18	143	62.7	0	0	NA	NA	NA	NA
	Metals	40	617	198	31.0	108	324	19.6	2.6	28.4	9 to 53
	Landfill parameters	28	61	123	22.4	52	77	14.6	2.2	20.2	8 to 25
Water	VOCs	7	5	36.4	14.3	18	54	9.7	1.7	12.6	11 to 14
	SVOCs	5	3	31.2	23.9	21	127	26.8	7.4	16.5	28 to 50
	OCs/PCBs	5	0	NA	NA	36	88	117	10.1	NA	38 to 60
	Herbicides	4	0	NA	NA	18	119	36.6	8.4	NA	32 to 50
	Metals	6	104	115	14.4	89	271	16.2	2.6	11.8	9 to 29
	Landfill parameters	6	9	172	31.1	40	56	15.4	3.0	28.1	4 to 38
	NA										

NA Not applicable  
OCs/PCBs Organochlorine pesticides/polychlorinated biphenyls  
RPD Relative percent difference  
SVOCs Semivolatile organic compounds  
VOCs Volatile organic compounds

- VOC and SVOC RPDs for laboratory duplicate samples were calculated using surrogate recovery data. RPDs for pesticides/PCBs, herbicides, metals, and other analyses were calculated using standard matrix spike recovery data.
- Average sample RPD was calculated by subtracting the laboratory duplicate average group RPD from the field duplicate average group RPD.
- The two values listed for RPD goals represent the range of RPD values for the different target analytes for a particular method.

**Table E5: Relative Percent Difference Summary  
for Matrix Spike/Matrix Spike Duplicate Samples**

Matrix Analyte Group	No. of Sample Pairs	Field Samples		Average Group RPD	RPD Goals
		No. of Pairs of Analyte Detections	Maximum RPD		
Soil					
VOCs	26	308	24.0	4.5	21 to 24
SVOCs	26	564	113.9	16.9	19 to 50
OCPs/PCBs	27	312	190.0	12.9	3.7 to 59
Herbicides	20	112	99.1	20.6	30 to 55
Dioxins	2	2	0	0	NA
Metals	61	453	174.4	8.2	9 to 53
Landfill parameters	33	104	139.9	10.6	8 to 25
Water					
VOCs	17	230	17.5	2.3	11 to 14
SVOCs	7	156	100.0	19.0	28 to 50
OCPs/PCBs	5	85	78.1	13.6	38 to 60
Herbicides	4	35	78.4	13.2	32 to 50
Metals	30	370	59.8	3.7	9 to 29
Landfill parameters	28	80	127.8	7.2	4 to 38

NA Not applicable  
OCP/PCB Organochlorine pesticides/polychlorinated biphenyl  
RPD Relative percent difference  
SVOC Semivolatile organic compounds  
VOC Volatile organic compounds

**Table E6: Summary of Rinse Blank and Source Water Blank Detections**

Analyte	Rinse Blank Samples		Source Water Samples	
	Range of Concentrations	No. of Detections	Range of Concentrations	No. of Detections
2-Cyclohexen-1-one	5.0	1	---	---
Acetone	21	1	<10	2
Alkalinity	6000 to 14000	3	5000 to 6000	2
Aluminum	40.9 to 83.9	6	<40 to 2000	4
Ammonia	63.4 to 69.9	2	<50 to 1000	6
Antimony	7.6 to 10.2	2	<3.05	2
bis (2-Ethylhexyl) phthalate	2 to 51	3	2.7 to <4.8	2
Boron	56.2	1	<50	2
Bromodichloromethane	2.9 to 3.0	2	<2 to 2.8	2
Calcium	103 to 20600	15	<100 to 9920	4
Chloroform	2.1 to 19	16	5.8 to 21	2
Copper	40.3 to 41.4	2	<5 to 243	4
Di-N-octyl phthalate	2.6	1	<2 to <15	4
Diacetone alcohol	6.0	1	---	---
Iron	54.5 to 204	8	<45 to 997	4
Lead	2.4 to 45.7	5	<2 to 48.4	4
Magnesium	105 to 7530	7	<50 to 9880	4
Manganese	51.2	1	<5 to 493	4
Nitrite, nitrate -- non-specific	196 to 208	2	<20 to 190	4
Sodium	101 to 6640	21	<100 to 9710	4
Total organic carbon	3100	1	<1000 to 58000	6
Total hardness	1000	1	<1000 to 40000	6
Zinc	25.0	1	<20 to 488	4

Units are in micrograms per liter

--- Analyte was not detected

**Table E7: Summary of Method Blank Detections**

Analyte	Soil Range of Concentrations*	No. of Detections	Water Range of Concentrations#	No. of Detections
1,1,2-Trichlor-1,2,2-trifluoroethane	0.007 to 0.009	6	---	---
1,2-Epoxy cyclohexene	---	---	4 to 30	9
2,6-Dinitrotoluene	1.2	1	---	---
2-Cyclohexen-1-ol	0.3	1	6 to 8	2
2-Cyclohexen-1-one	0.3	2	7	1
2-Ethyl-1-hexanol	3	2	---	---
2-Ethylhexanoic acid	2 to 3	2	---	---
Acetone	0.01 to 0.048	14	14	1
Aldrin	0.0039 to 0.0085	3	---	---
Alkalinity	---	---	5000	3
alpha-Chlordane	0.0033	1	---	---
Aluminum	320 to 14000	19	51.1	1
Arsenic	0.27 to 0.36	2	---	---
Benzoic acid	0.18 to 0.40	2	---	---
Benzyl alcohol	0.53 to 0.74	2	---	---
bis (2-Ethylhexyl) phthalate	0.18 to 200	14	2.0 to 39	17
Boron	5.3 to 470	3	50.5	1
Butylbenzylphthalate	0.3 to 0.39	2	---	---
Calcium	240 to 18000	19	124	1
Carbazole	0.43	1	---	---
Chloroform	---	---	2.3	1
Chromium	1.1 to 93	5	---	---
Copper	0.61 to 47	17	---	---
Cyclohexanol	---	---	10	1
Di-N-butyl phthalate	0.24 to 200	7	10	1
Di-N-octyl phthalate	0.32	1	---	---
Diacetone alcohol	3	2	---	---
Dicamba	0.21	1	---	---
Dichloroprop	0.011	1	---	---
Diethylphthalate	0.36	1	---	---
Diethyl adipate/Hexanedioic acid diethyl ester	0.5 to 1.0	2	---	---
Fluoride	2.64 to 3.83	7	---	---
gamma-Chlordane	0.0032 to 0.0043	4	---	---
Heptanoic acid	0.4	1	---	---
Iron	600 to 18000	19	---	---
Lauric acid	0.4	1	---	---
Lead	---	---	2.4 to 2.9	2
Magnesium	110 to 3500	19	---	---
Manganese	10 to 350	19	11.6	1
Myristic acid/Tetradecanoic acid	0.3	1	---	---
Nickel	2.5	1	---	---
Nitrite, Nitrate -- Non-Specific	0.206 to 0.24	5	---	---
Nonacosane	0.3 to 0.4	2	---	---
Palmitic acid/Hexadecanoic acid	1	2	---	---
Pentadecanoic acid	0.6	1	---	---
Potassium	100 to 5600	19	---	---
Sodium	39 to 3200	19	---	---
Total dissolved solids	---	---	121	1
Trichlorofluoromethane	0.006 to 0.009	4	2000	1
Vanadium	1.0 to 93	19	---	---
Zinc	470	1	---	---

--- Analyte not detected

\* Units are in micrograms per gram

# Units are in micrograms per liter

**Table E8: Quality Control Performance Goals and Results  
for Matrix Spike/Matrix Spike Duplicates and Surrogates  
Volatile Organic Compounds**

Volatile Organic Compounds	Percent Recovery Range Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
<b>Soil</b>				
MS/MSD				
1,1-Dichloroethene	59 to 172	66.7	144.1	107.0
Toluene	59 to 139	88.4	118.5	103.1
Trichloroethene	62 to 137	84.7	180.7	105.0
Benzene	66 to 142	89.1	118.3	104.0
Chlorobenzene	60 to 133	94.3	119.2	106.2
Surrogate Compounds				
4-Bromofluorobenzene	74 to 121	81.1	106.2	95.3
1,2-Dichloroethane-d <sub>4</sub>	70 to 121	88.4	115.9	101.6
Toluene-d <sub>8</sub>	81 to 117	95.5	118.2	105.1
<b>Water</b>				
MS/MSD				
1,1-Dichloroethene	61 to 146	70.3	125.4	101.3
Toluene	76 to 125	79.2	112.3	95.5
Trichloroethene	71 to 120	0.0	116.3	95.2
Benzene	76 to 127	88.2	115.5	100.2
Chlorobenzene	75 to 130	92.9	118.7	104.0
Surrogate Compounds				
4-Bromofluorobenzene	86 to 115	93.6	104.0	99.0
1,2-Dichloroethane-d <sub>4</sub>	76 to 114	95.5	112.2	100.8
Toluene-d <sub>8</sub>	88 to 110	96.6	103.3	100.1

MS/MSD Matrix spike/matrix spike duplicate  
RCRA Resource Conservation and Recovery Act  
USAEC U.S. Army Environmental Center

\* Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.

**Table E9: Quality Control Performance Goals and Results  
for Matrix Spike/Matrix Spike Duplicates and Surrogates  
Semivolatile Organic Compounds**

Semivolatile Organic Compounds	Percent Recovery Range Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
<b>Soil</b>				
MS/MSD				
Phenol	26 to 90	58.8	105.6	84.3
2-Chlorophenol	25 to 102	61.4	101.6	84.7
1,4-Dichlorobenzene	28 to 104	55.8	100.2	78.3
N-Nitroso-di-n-propylamine	41 to 126	45.6	105.9	74.5
1,2,4-Trichlorobenzene	38 to 107	59.4	107.1	80.7
4-Chloro-3-methylphenol	26 to 103	63.5	120.3	85.2
Acenaphthene	31 to 137	60.9	105.6	80.8
4-Nitrophenol	11 to 114	0.0	130.1	77.9
2,4-Dinitrotoluene	28 to 89	0.0	99.6	68.0
Pentachlorophenol	17 to 109	0.0	135.0	83.2
Pyrene	35 to 142	57.6	140.7	80.5
<b>Surrogate Compounds</b>				
Nitrobenzene-d5	23 to 120	50.1	96.3	73.2
2-Fluorobiphenyl	30 to 115	51.3	94.8	74.8
p-Terphenyl-d14	18 to 137	57.0	103.5	77.8
Phenol-d5	24 to 113	46.5	103.8	80.1
2-Fluorophenol	25 to 121	52.7	105.8	77.4
2,4,6-Tribomophenol	19 to 122	37.5	128.1	83.7
<b>Water</b>				
MS/MSD				
Phenol	12 to 89	64.4	95.8	77.0
2-Chlorophenol	27 to 123	64.2	95.5	77.5
1,4-Dichlorobenzene	36 to 97	55.2	68.9	60.8
N-Nitroso-di-n-propylamine	41 to 116	56.0	79.6	66.4
1,2,4-Trichlorobenzene	39 to 98	59.6	76.7	64.8
4-Chloro-3-methylphenol	23 to 97	64.2	101.5	85.0
Acenaphthene	46 to 118	60.0	77.5	68.7
4-Nitrophenol	10 to 80	46.9	106.2	75.7
2,4-Dinitrotoluene	24 to 96	59.1	94.0	77.7
Pentachlorophenol	9 to 103	64.5	142.9	92.9
Pyrene	26 to 127	60.6	93.4	77.3
<b>Surrogate Compounds</b>				
Nitrobenzene-d5	35 to 114	59.8	80.5	71.6
2-Fluorobiphenyl	43 to 116	66.0	81.7	72.6
p-Terphenyl-d14	33 to 141	72.4	110.4	83.1

**Table E9 (continued)**

Semivolatile Organic Compounds	Percent Recovery Range Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
Surrogate Compounds (continued)				
Phenol-d5	10 to 94	66.2	90.3	75.3
2-Fluorophenol	21 to 100	64.0	85.7	71.3
2,4,6-Tribromophenol	10 to 123	65.0	100.4	82.7

MS/MSD Matrix spike/matrix spike duplicate  
RCRA Resource Conservation and Recovery Act  
USAEC U.S. Army Environmental Center

\* Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.



**Table E10: Quality Control Performance Goals and Results  
for Matrix Spike/Matrix Spike Duplicates and Surrogates  
Organochlorine Pesticides and Polychlorinated Biphenyls**

Organochlorine Pesticides and PCBs	Percent Recovery Range Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
<b>Soil</b>				
MS/MSD				
gamma BHC (Lindane)	45 to 129	67.6	105.1	86.9
Heptachlor	30 to 148	66.0	108.9	89.1
Aldrin	53 to 133	64.5	114.4	94.8
Dieldrin	46 to 140	64.5	120.3	89.9
Endrin	52 to 126	54.1	110.8	89.2
4,4-DDT	37 to 155	36.4	116.2	86.8
Surrogate Compounds				
Tetrachloro-m-xylene	60 to 150	66.0	106.9	88.0
Decachlorobiphenyl	60 to 150	57.4	169.0	103.2
<b>Water</b>				
MS/MSD				
gamma BHC (Lindane)	43 to 145	38.0	87.3	74.6
Heptachlor	48 to 124	46.4	89.1	75.4
Aldrin	37 to 127	31.0	115.2	76.6
Dieldrin	56 to 142	36.4	100.7	82.4
Endrin	35 to 155	41.9	110.5	90.9
4,4-DDT	46 to 152	44.3	105.5	83.4
Surrogate Compounds				
Tetrachloro-m-xylene	60 to 150	48.6	92.8	76.8
Decachlorobiphenyl	60 to 150	48.6	103.9	58.8

MS/MSD Matrix spike/matrix spike duplicate  
PCBs Polychlorinated biphenyls  
RCRA Resource Conservation and Recovery Act  
USAEC U.S. Army Environmental Center

\* Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.

**Table E11: Quality Control Performance Goals and Results for  
Matrix Spike/Matrix Spike Duplicates and Surrogates  
Herbicides**

Herbicides	Percent Recovery Range Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
<b>Soil</b>				
MS/MSD				
2,4-D	35 to 131	27.8	108.5	63.6
2,4-DB	84 to 102	23.4	96.0	64.0
Dicamba	57 to 121	13.7	126.7	78.0
Dichlorprop	91 to 103	23.3	104.7	66.1
2,4,5-T	67 to 103	16.4	101.5	65.6
2,4,5-TP	61 to 143	23.0	98.7	56.3
<b>Surrogate Compound</b>				
DCAA	3 to 126	26.6	114.1	68.7
<b>Water</b>				
MS/MSD				
2,4-D	9 to 119	36.4	114.1	69.3
2,4-DB	84 to 102	71.0	84.7	76.3
Dicamba	21 to 115	57.9	74.7	67.3
Dichlorprop	91 to 103	56.3	102.6	75.5
2,4,5-T	67 to 103	78.8	101.9	91.5
2,4,5-TP	33 to 135	52.7	90.1	73.5
<b>Surrogate Compound</b>				
DCAA	28 to 112	64.3	100.4	86.6

MS/MSD Matrix spike/matrix spike duplicate  
RCRA Resource Conservation and Recovery Act  
USAEC U.S. Army Environmental Center

\* Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.

**Table E12: Quality Control Matrix Spike/Matrix Spike Duplicate Goals and Results  
Dioxins and Furans**

Dioxins and Furans	Mean Percent Recoveries Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
Soil				
2,3,7,8-TCDF	60 to 140	98	101	99
1,2,3,7,8-PeCDF	60 to 140	100	106	102
2,3,4,7,8-PeCDF	60 to 140	96	110	102
1,2,3,4,7,8-HxCDF	60 to 140	92	101	96
1,2,3,6,7,8-HxCDF	60 to 140	94	103	99
2,3,4,6,7,8-HxCDF	60 to 140	87	100	95
1,2,3,7,8,9-HxCDF	60 to 140	75	115	98
1,2,3,4,6,7,8-HpCDF	60 to 140	70	98	90
1,2,3,4,7,8,9-HpCDF	60 to 140	90	126	111
OCDF	60 to 140	103	122	114
2,3,7,8-TCDD	60 to 140	94	101	99
1,2,3,7,8-PeCDD	60 to 140	98	103	101
1,2,3,4,7,8-HxCDD	60 to 140	95	110	101
1,2,3,6,7,8-HxCDD	60 to 140	97	112	105
1,2,3,7,8,9-HxCDD	60 to 140	74	107	92
1,2,3,4,6,7,8-HpCDD	60 to 140	97	103	100
OCDD	60 to 140	82	107	99
Water*				
2,3,7,8-TCDF	60 to 140	97	103	100 (94)
1,2,3,7,8-PeCDF	60 to 140	106	112	109
2,3,4,7,8-PeCDF	60 to 140	112	136	124 (100)
1,2,3,4,7,8-HxCDF	60 to 140	98	104	101 (93)
1,2,3,6,7,8-HxCDF	60 to 140	100	107	104
2,3,4,6,7,8-HxCDF	60 to 140	100	109	105
1,2,3,7,8,9-HxCDF	60 to 140	104	111	108
1,2,3,4,6,7,8-HpCDF	60 to 140	100	106	103 (100)
1,2,3,4,7,8,9-HpCDF	60 to 140	116	117	117
OCDF	60 to 140	106	122	114 (128)
2,3,7,8-TCDD	60 to 140	94	106	100 (97)
1,2,3,7,8-PeCDD	60 to 140	101	102	102 (110)
1,2,3,4,7,8-HxCDD	60 to 140	102	109	106 (90)
1,2,3,6,7,8-HxCDD	60 to 140	103	108	106
1,2,3,7,8,9-HxCDD	60 to 140	96	106	101
1,2,3,4,6,7,8-HpCDD	60 to 140	102	104	103 (100)
OCDD	60 to 140	106	108	107 (100)

RCRA Resource Conservation and Recovery Act  
USAEC U.S. Army Environmental Center

\* Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.

# Mean recoveries shown in parentheses are for the low resolution method. Water recoveries not shown in parentheses are for the high resolution method.

**Table E13: Quality Control Performance Goals and Results  
for Matrix Spike/Matrix Spike Duplicates and Surrogates  
Metals and Cyanide**

Metals	Percent Recovery Range Goals <sup>a</sup>	Actual Percent Recoveries		
		Minimum	Maximum	Mean
<b>Soil</b>				
Aluminum	75 to 117	NC	NC	NC
Antimony	79 to 109	44.9	100.5	79.4
Arsenic	72 to 120 <sup>b</sup>	-15.1	414.9	109.3
Barium	86 to 106	63.4	104.8	91.0
Beryllium	78 to 108	78.4	108.0	97.3
Calcium	60 to 116	52.4	987.9	161.2
Cadmium	80 to 108	80.6	114.3	96.3
Cobalt	85 to 105	72.0	99.5	87.7
Chromium	79 to 109	38.7	105.5	84.4
Copper	84 to 108	-14.3	992.6	118.1
Cyanide	81 to 117	-0.3	131.5	97.2
Iron	86 to 108	NC	NC	NC
Potassium	75 to 113	-20.8	159.2	80.7
Magnesium	28 to 134	-36.3	117.8	78.0
Manganese	83 to 107	55.0	209.0	97.1
Mercury	83 to 125 <sup>c</sup>	64.6	113.6	97.3
Sodium	29 to 131	72.7	106.7	95.8
Nickel	78 to 106	66.7	1144.0	102.1
Lead	79 to 109	-55.0	169.8	85.7
Selenium	71 to 129 <sup>d</sup>	4.8	70.4	25.6
Thallium	75 to 111	68.7	101.9	88.1
Vanadium	87 to 105	61.4	106.5	86.8
Zinc	76 to 112	20.9	161.0	89.3
<b>Water</b>				
Aluminum	81 to 113	46.9	111.3	95.8
Antimony	75 to 125 <sup>e</sup>	59.2	118.4	94.9
Arsenic	72 to 120 <sup>b</sup>	84.4	125.0	101.1
Barium	86 to 106	92.1	103.2	97.4
Beryllium	78 to 108	93.6	104.6	98.9
Calcium	78 to 116	95.5	104.0	99.2
Cadmium	80 to 108	90.9	106.5	98.2
Cobalt	85 to 105	89.8	100.8	95.6
Chromium	79 to 109	88.1	103.0	95.9
Copper	84 to 108	91.3	113.6	97.9
Cyanide	81 to 117	82.3	109.9	102.2
Iron	77 to 113	57.9	133.7	99.7
Potassium	75 to 113	88.7	110.3	98.1
Magnesium	86 to 106	85.3	109.8	99.9
Manganese	83 to 107	89.9	119.2	96.4
Mercury	83 to 125 <sup>c</sup>	66.3	107.9	95.1

**Table E13 (continued)**

Metals	Percent Recovery Range Goals <sup>a</sup>	Actual Percent Recoveries		
		Minimum	Maximum	Mean
Sodium	82 to 112	86.9	113.4	98.5
Nickel	78 to 106	89.9	103.2	95.9
Lead	71 to 125 <sup>f</sup>	67.8	112.0	87.3
<b>Water (continued)</b>				
Selenium	71 to 129	48.8	103.2	76.7
Thallium	74 to 128 <sup>g</sup>	56.2	103.4	74.1
Vanadium	87 to 105	91.1	102.3	96.5
Zinc	76 to 112	89.1	118.6	98.3

MS/MSD Matrix spike, matrix spike duplicate  
 NC Not calculated because analyte concentration in sample is at least four times the concentration of the analytes in the matrix spike  
 RCRA Resource Conservation and Recovery Act  
 USAEC U.S. Army Environmental Center

- a. Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.
- b. USAEC Method GAS1
- c. USAEC Method HGC1
- d. USAEC Method GSE1
- e. USAEC Method GSB1
- f. USAEC Method GPB1
- g. USAEC Method GTL1

**Table E14: Quality Control Performance Goals and Results  
for Matrix Spike/Matrix Spike Duplicates  
Landfill Parameters**

Landfill Parameters (Method)	Percent Recovery Range Goals*	Actual Percent Recoveries		
		Minimum	Maximum	Mean
Soil				
Alkalinity (310.1)	NA	NA	NA	NA
Ammonia (350.1)	NA	80.4	185.5	103.2
Biochemical Oxygen Demand (40-9.1)	NA	NA	NA	NA
Boron (200.7)	NA	80.8	103.0	94.9
Chemical Oxygen Demand (410.4)	NA	NA	NA	NA
Chloride (300.0)	NA	97.1	105.5	100.9
Fluoride (300.0)	NA	53.3	98.0	82.8
Hardness (130.2)	NA	NA	NA	NA
Nitrate (353.2)	NA	66.3	109.5	86.4
pH (150.1/9045)	NA	NA	NA	NA
Specific Conductivity (120.1)	NA	NA	NA	NA
Sulfate (300.0)	NA	99.7	107.4	101.2
Total Dissolved Solids (160.1)	NA	NA	NA	NA
Total Organic Carbon (9060/415.1)	82 to 116	NA	NA	NA
Total Phenolic Compounds (9066)	72 to 122	86.7	109.0	101.7
Water				
Alkalinity (310.1)	88 to 110	NA	NA	NA
Ammonia (350.1)	94 to 106	87.9	103.8	97.0
Biochemical Oxygen Demand (40-9.1)	60 to 130	NA	NA	NA
Boron (200.7)	NA	-0.4	106.7	87.5
Chemical Oxygen Demand (410.4)	NA	NA	NA	NA
Chloride (300.0)	95 to 107	89.2	101.7	97.4
Fluoride (300.0)	NA	83.9	94.7	87.4
Hardness (130.2)	85 to 115	NA	NA	NA
Nitrate (353.2)	95 to 105	93.0	106.4	100.9
pH (150.1/9045)	NA	NA	NA	NA
Specific Conductivity (120.1)	NA	NA	NA	NA
Sulfate (300.0)	95 to 107	91.1	105.6	99.2
Total Dissolved Solids (160.1)	NA	NA	NA	NA
Total Organic Carbon (9060/415.1)	87 to 113	NA	NA	NA
Total Phenolic Compounds (9066)	73 to 112	91.7	104.6	98.4

NA Information not available  
RCRA Resource Conservation and Recovery Act  
USAEC U.S. Army Environmental Center

\* Source: U.S. Army Environmental Center Quality Assurance Project Plan for Fort Benjamin Harrison RCRA Facility Investigation, Marion County, Indiana.

**Table E15: Summary of Field Completeness**

Sample Location	Number of Samples												Percent Complete Per Site		
	Surface Soil		Subsurface Soil		Groundwater		Surface Water		Sediment		Soil from Test Pit			Total No. of Samples per Site	
	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual	Proposed	Actual		Proposed	Actual
EI Site 1	---	---	15	15	4	4	---	---	---	---	---	---	19	19	100
EI Site 2	---	---	20	21	4	4	---	---	---	---	---	---	24	25	104
EI Site 3	---	---	15	15	4	4	---	---	---	---	---	---	19	19	100
EI Site 4	---	---	15	15	4	4	---	---	---	---	---	---	19	19	100
EI Site 5	5	5	15	14	---	---	---	---	---	---	---	---	20	19	95
EI Site 6	10	10	7	10	---	---	---	---	---	---	---	---	17	20	118
SWMU 2	2	2	11	11	---	---	---	---	---	---	---	---	13	13	100
SWMU 8	12	12	19	19	4	4	---	---	---	---	---	---	35	35	100
SWMU 11*	10	10	17	17	5	5	---	---	2	2	---	---	34	34	100
SWMU 17	25	25	24	21	---	---	---	---	---	---	---	---	49	46	94
EI Site SM18	---	---	---	---	---	---	---	2	3	3	---	---	5	5	100
EI Site SM19	12	12	---	---	---	---	---	---	---	---	---	---	12	12	100
EI Site SM20	12	12	4	4	---	---	2	2	2	2	---	---	20	20	100
EI Site SM21	12	12	---	---	---	---	---	---	2	2	---	---	14	14	100
EI Site SM22 <sup>#</sup>	11	11	5	5	---	---	2	2	2	2	---	---	20	20	100
EI Site SM23 <sup>#</sup>	10	10	5	5	---	---	2	2	2	2	---	---	19	19	100
EI Site SM24 <sup>#</sup>	17	17	6	6	---	---	---	---	---	---	---	---	23	23	100
EI Sites 25a- Total number of samples per sample type	---	---	33	47	---	---	---	---	---	---	2	2	35	49	140
Percent complete	138	138	211	225	25	25	8	8	13	13	2	2	397	411	104
	100	100	107	107	100	100	100	100	100	100	100	100	103	103	

--- No samples proposed to be collected  
EI Environmental Investigation  
SWMU Solid Waste Management Unit

\* For SWMU 11 the number of proposed subsurface soil and groundwater samples was given as a range. For calculating percent complete, the proposed number of samples was considered to equal the actual number because the actual number of samples was within the proposed range.

\* Although the work plan called for twice as many samples to be collected, half of the collected samples were intended for field analyses.

No samples were proposed to be collected for laboratory analysis from SWMUs 26, 27, and 28.

Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**Appendix F**  
**FIELD DOCUMENTATION**



Phase I EI Report  
IN4 210 090 003  
September 18, 1995

## **MONITORING WELL DEVELOPMENT FORMS**

## WELL DEVELOPMENT

Log Book # 18Page 1 of 1

Well No.: <b>E1001MW001</b> Casing Diameter: <b>4</b> in. Casing Suckup: <b>1.85</b> ft. Total Well Depth: <b>13.43</b> ft. <i>initial</i> Static Water Level: <b>5.67</b> ft. Saturated Thickness: <b>7.76</b> ft. Casing Volume: <b>13.21</b> gal. Screened Interval: <b>6-11</b> ft.		<b>Purge Equipment</b> <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input checked="" type="checkbox"/> Stainless Bailor O.D. <input type="checkbox"/> 1.85" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" <input checked="" type="checkbox"/> 2.5" LENGTH <input checked="" type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> 6 ft. SERIAL NO. _____		<b>pH Meter:</b> <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Omega pH-65A <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 51B SERIAL NO. _____ <b>Temperature Meter:</b> <input type="checkbox"/> Beckman <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <b>Water Level Meter:</b> Solinst <input checked="" type="checkbox"/> HLA		Date: <b>1/12/94</b> HLA Project No.: <b>21579</b> Location: <b>01.09.13</b> <b>Meter Calibration</b> pH 7.00 = <b>7.0</b> at <b>52.8</b> °C Time <b>0800</b> pH 10.00 = <b>10.0</b> at <b>57.8</b> °C Time <b>0900</b> Conductance Standard: _____ µmhos/cm at 25° C Measured Value: _____ µmhos/cm at _____ °C Calibrated Conductivity = Measured Conductance + (0.02) (measured conductance) (25° C - Actual Temp): _____ Dissolved Oxygen _____ mg/l at _____ °C <b>Titration Results (Acid Concentration: <input type="checkbox"/> 0.1N, <input type="checkbox"/> 1.8N)</b> pH <b>8.3</b> <b>5.1</b> <b>4.6</b> <b>4.5</b> #Clicks _____ Color _____																																																																																																	
Time	Number of Casing Volumes	Gallons Removed	°F	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/Liter	Pump Rate gpm	Approx. Pump Depth ft.	Visual Description																																																																																														
1520	0	0	44.8	535	7.26	0.0	0.0		Brown, very turbid with many fines																																																																																														
1617	1	13.2	46.0	590	7.17	0.0	0.0		Brown, very turbid with many fines																																																																																														
Bailing Continued on 1/13/94																																																																																																							
1046	2	26.4	41.1	645	6.72	0.0	0.0		Brown, very turbid with many fines																																																																																														
1605	3	39.6	46.7	767	6.50	0.0	0.0		Brown, much less turbid, some fines																																																																																														
1805	~3.4	45	51.9	762	6.58	0.0	0.0		Brown, much less turbid, some fines																																																																																														
Development complete as per protocols set by Kerry Comer & Mike Raust.																																																																																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width:10%;">Analysis Requested</td> <td style="width:10%;">Volatile Aromatics</td> <td style="width:10%;">Volatile Organohalogenes</td> <td style="width:10%;">Organosulfur Compounds</td> <td style="width:10%;">Organochlorine Pesticides</td> <td style="width:10%;">Phosphonates</td> <td style="width:10%;">Hydrocarbons</td> <td style="width:10%;">Anions</td> <td style="width:10%;">Nitrate/Nitrite (0.5 ml H<sub>2</sub>SO<sub>4</sub>)</td> <td style="width:10%;">Arsenic (0.5 ml HNO<sub>3</sub>)</td> <td style="width:10%;">Mercury (0.5 ml HNO<sub>3</sub>)</td> <td style="width:10%;">ICP Metals (0.5 ml HNO<sub>3</sub>)</td> <td style="width:10%;">Acid Extractables</td> <td style="width:10%;">Cyanide (1 ml NaOH)</td> <td style="width:10%;">GC/MS/Volatiles</td> <td style="width:10%;">GC/MS SVI/acid Extractables</td> <td style="width:10%;">Nit/Phos Pesticides</td> <td style="width:20%;">Health and Safety Officer Comments:</td> <td style="width:10%;">Sample Depth (cm):</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Protective Level: <b>① C<sub>1</sub> B</b> <b>Modified</b></td> </tr> <tr> <td colspan="17"></td> <td>Health and Safety Officer Signature:</td> <td></td> </tr> <tr> <td colspan="17"></td> <td>Condition of Well, Remarks:</td> <td></td> </tr> <tr> <td colspan="17"></td> <td>Sampler Signature: <u>Marcus E. Arenal</u></td> <td></td> </tr> </table>										Analysis Requested	Volatile Aromatics	Volatile Organohalogenes	Organosulfur Compounds	Organochlorine Pesticides	Phosphonates	Hydrocarbons	Anions	Nitrate/Nitrite (0.5 ml H <sub>2</sub> SO <sub>4</sub> )	Arsenic (0.5 ml HNO <sub>3</sub> )	Mercury (0.5 ml HNO <sub>3</sub> )	ICP Metals (0.5 ml HNO <sub>3</sub> )	Acid Extractables	Cyanide (1 ml NaOH)	GC/MS/Volatiles	GC/MS SVI/acid Extractables	Nit/Phos Pesticides	Health and Safety Officer Comments:	Sample Depth (cm):																		Protective Level: <b>① C<sub>1</sub> B</b> <b>Modified</b>																		Health and Safety Officer Signature:																			Condition of Well, Remarks:																			Sampler Signature: <u>Marcus E. Arenal</u>	
Analysis Requested	Volatile Aromatics	Volatile Organohalogenes	Organosulfur Compounds	Organochlorine Pesticides	Phosphonates	Hydrocarbons	Anions	Nitrate/Nitrite (0.5 ml H <sub>2</sub> SO <sub>4</sub> )	Arsenic (0.5 ml HNO <sub>3</sub> )		Mercury (0.5 ml HNO <sub>3</sub> )	ICP Metals (0.5 ml HNO <sub>3</sub> )	Acid Extractables	Cyanide (1 ml NaOH)	GC/MS/Volatiles	GC/MS SVI/acid Extractables	Nit/Phos Pesticides	Health and Safety Officer Comments:	Sample Depth (cm):																																																																																				
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## WELL DEVELOPMENT Log Book # 18

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Well No.: <u>E100(MW002)</u>	Purge Equipment <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input checked="" type="checkbox"/> Stainless Bailor	pH Meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Omega pH-65A <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u>	Date: <u>1/12/94</u>	HLA Project No.: <u>21574, 01.09.13</u>	Location: <u>FBH Indiana</u>
Casing Diameter <u>4</u> in.			Meter Calibration pH 7.00 = <u>7.01</u> at _____ °C Time _____ pH 10.00 = <u>10.01</u> at _____ °C Time _____ Conductance Standard: _____ µmhos/cm at 25° C Time _____ Measured Value: _____ µmhos/cm at _____ °C Calibrated Conductivity = Measured Conductance + (0.02) (measured conductance) (25° C - Actual Temp): _____ Time _____ _____ µmhos/cm at 25° C Time _____ Dissolved Oxygen _____ mg/l at _____ °C Time _____		
Casing Stickup <u>-0.4</u> ft.	O.D. _____ LENGTH _____ 1.85" <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 1.85" <input type="checkbox"/> 3 ft. <input type="checkbox"/> 3.75" <input type="checkbox"/> 4 ft. <input type="checkbox"/> _____ <input type="checkbox"/> _____ ft. <input type="checkbox"/> SERIAL NO. _____	Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u>			
Total Well Depth Initial <u>10.20</u> Final <u>10.89</u> ft.		Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 51B SERIAL NO. _____			
Static Water Level <u>3.92</u> ft.	Sample Equipment <input type="checkbox"/> Same as Purge <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Stainless Bailor	Temperature Meter: <input type="checkbox"/> Beckman <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u>			
Saturated Thickness <u>6.28</u> ft.		Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter	Titration Results (Acid Concentration: <input type="checkbox"/> 0.16, <input type="checkbox"/> 1.6) pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks _____ Color _____		
Casing Volume Borms <u>11.55</u> gal.	O.D. _____ LENGTH _____ 1.85" <input type="checkbox"/> 2 ft. <input type="checkbox"/> 1.85" <input type="checkbox"/> 3 ft. <input type="checkbox"/> 3.75" <input type="checkbox"/> 4 ft. <input type="checkbox"/> _____ <input type="checkbox"/> _____ ft. <input type="checkbox"/> SERIAL NO. _____	Water Level Meter: Solinst <u>X</u> HLA _____			
Screened Interval <u>6-11</u> ft.					

Time	Number of Casing Volumes	Gallons Removed	OP	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/l at 25°C	Pump Rate gpm	Approx. Pump Depth ft.	Visual Description
1241	0	0	47.2	818	7.16	0.0	0.0		Brown, very turbid with alot of fines
1322	1	12	48.8	821	7.12	0.0	0.0		Brown, very turbid with alot of fines
1627	2	24	46.8	822	7.04	0.0	0.0		Brown, less turbid with fines
1817	3	36	46.7	815	6.97	0.0	0.0		Brown, less turbid with fines
Dialing Continued on 1/13/94									
1058	4	48	41.6	803	6.84	0.0	0.0		Brown, less turbid with fines
1350	5	60	52.5	885	6.84	0.0	0.0		Brown, less turbid with fines
Problems with meter ising up, was moved inside truck - data may be unreliable									

Analysis Requested	Volatile Aromatics	Volatile Organohalogenes	Organosulfur Compounds	Organochlorine Pesticides	Phosphonates	Hydrocarbons	Amines	Nitrate/Nitrite (0.5 ml H <sub>2</sub> SO <sub>4</sub> )	Arsenic (0.5 ml HNO <sub>3</sub> )	Mercury (0.5 ml HNO <sub>3</sub> )	ICP Metals (0.5 ml HNO <sub>3</sub> )	Acid Extractables	Cyanide (1 ml NaOH)	GC/MS Volatiles	GC/MS SV/ Acid Extractables	NTP/Phos Pesticides	Health and Safety Officer Comments:	Sample Depth (cm):
																	Health and Safety Officer Signature:	Protective Level: <input checked="" type="radio"/> D <input type="radio"/> C <input type="radio"/> B <u>modified</u>
																	Condition of Well, Remarks: <u>Flush mount</u>	
Sampler Signature: <u>Mason E. Arnold</u>																		

## WELL DEVELOPMENT Log Book # 18

Page 1 of 1

Well No.: <b>EI001MW003</b>	Purge Equipment <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input checked="" type="checkbox"/> Stainless Bailer O.D. LENGTH 1.85" <input type="checkbox"/> 2 R 1.85" <input type="checkbox"/> 3 R 3.75" <input type="checkbox"/> 4 R 3.5" <input checked="" type="checkbox"/> 4 R SERIAL NO. _____	pH Meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Omega pH-85A <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 51B SERIAL NO. _____ Temperature Meter: <input type="checkbox"/> Beckman <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter Water Level Meter: Solinst <u>X</u> HLA	Date: <u>1/12/94</u> HLA Project No.: <u>21574</u> <u>01.09.13</u> Location: <u>FBH</u> <u>Endicott, NY</u> Meter Calibration pH 7.00= <u>7.0</u> at _____ °C Time _____ pH 10.00= <u>10.0</u> at _____ °C Time _____ Conductance Standard: _____ µmho/cm at 25° C Time _____ Measured Value: _____ µmho/cm at _____ °C Time _____ Calibrated Conductivity = Measured Conductance + (0.02) (measured conductance) (25° C - Actual Temp): _____ µmho/cm at 25° C Time _____ Dissolved Oxygen _____ mg/l at _____ °C Time _____ Titration Results (Acid Concentration: <input type="checkbox"/> 0.16, <input type="checkbox"/> 1.6) pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks _____ Color _____
Casing Diameter <u>4</u> in.	Casing Pickup <u>1.687</u> ft	Total Well Depth <u>13.24</u> ft	Static Water Level <u>5.76</u> ft
Saturated Thickness <u>7.48</u> ft	Casing Volume <u>13.02</u> gal	Screened Interval <u>6-11</u> ft	

Time	Number of Casing Volumes	Gallons Removed	OF	E.C. µmho/cm	pH	Dissolved O <sub>2</sub> mg/l	Pump Rate gpm	Approx. Pump Depth ft.	Visual Description
1348	0	0		47.7	870	6.90	0.4	0.0	Brown, very turbid, many fines
1413	1	13		49.0	874	6.96	0.0	0.0	Brown, very turbid, many fines
1637	2	26		46.6	877	6.89	0.0	0.0	Brown, very turbid, many fines
1839	3	39		47.5	913	6.79	0.0	0.0	Slight brown, much less turbid with fines
Bailing continued on 1/12/94									
1115	4	52		45.2	1140	6.76	0.0	0.0	Slight brown, much less turbid, with fines
1512	5	65		51.4	1250	6.85	0.0	0.0	Slight brown, much less turbid with some fang
temp & cond. meter kept in truck bed for last reading									

Analytes Requested Volatile Aromatics Volatile Organohalogenes Organosulfur Compounds Organochlorine Pesticides Phosphonates Hydrocarbons Atrazine Nitrate/Nitrite (0.5 ml H <sub>2</sub> SO <sub>4</sub> ) Arsenic (0.5 ml HNO <sub>3</sub> ) Mercury (0.5 ml HNO <sub>3</sub> ) ICP Metals (0.5 ml HNO <sub>3</sub> ) Acid Extractables Cyanide (1 ml NaOH) GC/MS Volatiles GC/MS SV/Acid Extractables NitroPhos Pesticides	Health and Safety Officer Comments:	Sample Depth (cm):
	Health and Safety Officer Signature:	Protective Level: <u>D C B</u> <u>mod. Flood</u>
	Condition of Well, Remarks:	
Sampler Signature: <u>Marcus E. Jensen</u>		

FI Site 1

Log Book #

Page of

**Sampler Signature:**



## WELL DEVELOPMENT

Log Book # 18

Page 1 of 1

Well No.: EI 002 MW001

Casing Diameter: 4 in.

Casing Pickup: 0.42 ft.

Total Well Depth: 10.81 / 11.05 ft.

Static Water Level: 2.66 ft.

Saturated Thickness: 8.15 ft.

Casing Volume Boring: 12.84 gal.

Screened Interval: 6-11 ft.

Purge Equipment

☐ Bennett Pump (Teflon Tubing)  
☐ ISCO Pump (Teflon Tubing)  
☐ Standard Pump (PVC Tubing)  
☐ Grundfos Pump (Neoprene Tubing)  
☒ Stainless Bailor

O.D.

1.85" ☐

1.85" ☐

3.75" ☒

LENGTH

2 ft. ☐

3 ft. ☐

4 ft. ☐

SERIAL NO.

Sample Equipment

☐ Same as Purge  
☐ Bennett Pump (Teflon Tubing)  
☐ ISCO Pump (Teflon Tubing)  
☐ Standard Pump (PVC Tubing)  
☐ Stainless Bailor

O.D.

1.85" ☐

1.85" ☐

3.75" ☐

LENGTH

2 ft. ☐

3 ft. ☐

4 ft. ☐

SERIAL NO.

pH Meter:

☐ Beckman pH 11  
☐ Omega pH-65A  
☐ Orion SA250  
☒ Other Hydac

SERIAL NO. 9304

Conductivity Meter:

☐ YSI Model 33  
☒ Other Hydac

SERIAL NO. 9304

Dissolved Oxygen Meter:

☐ YSI Model 51B  
☐ Other Hydac

SERIAL NO.

Temperature Meter:

☐ Beckman  
☒ Other Hydac

SERIAL NO. 9304

Filtration Equipment:

☐ Geotech Peristaltic Pump  
☐ Geotech 0.45 micron filter

Water Level Meter:

☒ Solinst  
☐ HLA

Date: 1/10/94

HLA Project No.: 21574.01

Location: Indianapolis Fort Ben

Meter Calibration

pH 7.00= 7.0 at 13.45

pH 10.00= 10.0 at 13.45

Conductance Standard: umhos/cm at 25° C

Measured Value: umhos/cm at 25° C

Calculated Conductivity = Measured Conductance + (0.02) (measured conductance) (25° C - Actual Temp):

Dissolved Oxygen mg/l at 25° C

Titration Results (Acid Concentration: 0.16, 1.5)

pH 8.3 5.1 4.8 4.5

#Clicks

Color

Time	Number of Casing Volumes Boring	Gallons Removed	° F	E.C. umhos/cm	pH	Dissolved O <sub>2</sub> mg/l	Pump Rate gpm	Approx. Pump Depth ft.	Visual Description
1620	0	0	46.7	2150	7.78	0.4	0.0		Brown, very turbid with fines
1637	1	13	45.0	2080	7.66	0.8	0.0		Brown, slightly less turbid, with fines
1740	2	26	44.9	2250	7.58	0.7	0.0		Brown, much less turbid with fines
Development continued on 1/11/94									
0947	3	39	47.0	2250	7.65	0.1	0.0		Brown, turbid with fines
1128	4	52	46.6	2770	7.58	0.2	0.0		Much less turbid slightly brown.
1257	5	65	47.0	2790	7.55	0.3	0.0		Slightly turbid but consistent with previous volume.

Analysis Requested

Volatile Aromatics

Volatile Organohalogenes

Organosulfur Compounds

Organochlorine Pesticides

Phosphonates

Hydrocarbons

Amines

Nitrate/Nitrite (0.5 ml H<sub>2</sub>SO<sub>4</sub>)

Arsenic (0.5 ml HNO<sub>3</sub>)

Mercury (0.5 ml HNO<sub>3</sub>)

ICP Metals (0.5 ml HNO<sub>3</sub>)

Acid Extractables

Cyanide (1 ml NaOH)

GC/MS Volatiles

GC/MS SV/ADD Extractables

NH/Phos Pesticides

Health and Safety Officer Comments:

Health and Safety Officer Signature:

Condition of Well, Remarks: Flush count

Sampler Signature: Mark E. Jernell

Sample Depth (cm):

Protective Level: C C B modified

F 1125.1  
Harding Lawson Associates

Well Development

Task 01.09.13

nr

Log Book # 18

## GROUNDWATER SAMPLING FIELD DATA SHEET

Job # 21574

Page of

Well ID. No. <b>E5002 MW002</b>	Purge Equipment <input type="checkbox"/> Other <input checked="" type="checkbox"/> 4" Boiler	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydarc 910</u> SERIAL NO. <u>2481</u>	Sampler's Initials <u>Qce</u>	Time <u>1300</u>	Date <u>0/28/94</u>
Casing Diameter <u>4</u> in.	<input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> ft.	Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydarc 910</u> SERIAL NO. <u>2481</u>	Meter Calibration pH <u>7.03</u> = <u>7.03</u> at <u>20</u> °C <u>12:05</u> Time pH <u>4.00</u> = <u>4.00</u> at <u>20</u> °C <u>12:09</u> Time		
Casing Stickup ft.		Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u>	Conductance Standard: <u>1413</u> µmhos/cm at 25°C Measured Value: <u>1278</u> µmhos/cm at <u>20</u> °C <u>12:00</u> Time		
Total Well Depth (from TOC) <u>10.01</u> ft.	Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> ft.	Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydarc 910</u> SERIAL NO. <u>2481</u>	Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at <u>20</u> °C		
Static Water Level (from TOC) <u>6.01</u> ft.		Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter	Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u>		
Water Thickness <u>11.90</u> ft.		Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. _____	#Clicks		
Casing Volume <u>5.57</u> gal.			Color		
Screened Interval (from GS) <u>7.5</u> ft.			Sample Depth: (ft.)		
Purge Containerized? <u>55 gallon drum</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination:					

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1450	0	-	-	34.7	329	5.90				Muddy
1500	1	6.0	7.51	43.8	622	6.27				Muddy
1525	2	12.0	6.57	41.0	495	6.79				Muddy
1532	3	18.0	7.47	45.2	662	6.76				Muddy
1540	4	24.0	9.46	45.4	635	6.86				Muddy
1549	5	30.0	10.37	47.6	628	6.91				Muddy
1553	6	36.0	10.33	49.2	644	7.00				LESS muddy
1600	7	42.0	10.50	49.1	637	7.01				almost clear
1610	8	48.0	10.71	49.1	597	7.10				"

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples: GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC \_\_\_\_\_  
 BZ \_\_\_\_\_  
 Bkgnd \_\_\_\_\_

Sample Readings:

 TOC \_\_\_\_\_  
 BZ \_\_\_\_\_  
 Bkgnd \_\_\_\_\_
Protective Level:  
B C D

Additional Comments:

Continued development of well  
 past 5 volumes to remove  
 silt & fines

SERIAL NO. \_\_\_\_\_

HSO Signature: \_\_\_\_\_

Condition of Well, Remarks:

Sampler's Signature: Dave Eubank

## WELL DEVELOPMENT

Log Book # 18

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Well No.: <b>EI002 MW003</b>		Purge Equipment <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input checked="" type="checkbox"/> Stainless Bailor		pH Meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Omega pH-85A <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u>		Date: <b>1/11/94</b>		HLA Project No.: <b>21574, 01.09.13</b>		Location: <b>FBA Indianapolis, IN</b>	
Casing Diameter <b>4</b> in.		Casing Sdcup <b>-2.5"</b> ft.		Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u>		Meter Calibration pH 7.00 = <u>7.0</u> at _____ °C _____ Time pH 10.00 = <u>10.0</u> at _____ °C _____ Time		Conductance Standard: _____ µmhos/cm at 25° C _____ Time Measured Value: _____ µmhos/cm at _____ °C _____ Time Calibrated Conductivity = Measured Conductance + (0.02) (measured conductance) (25° C - Actual Temp): _____ Time _____ µmhos/cm at 25° C _____ Time Dissolved Oxygen _____ mg/l at _____ °C _____ Time		Titration Results (Acid Concentration: <input type="checkbox"/> 0.18, <input type="checkbox"/> 1.8) pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b> #Clicks _____ Color _____	
Total Well Depth Initial <b>21.84</b> / 22.11 ft.		O.D.      LENGTH 1.85" <input type="checkbox"/> 2 ft. 1.85" <input type="checkbox"/> 3 ft. 3.75" <input type="checkbox"/> 4 ft. 2.5" <input checked="" type="checkbox"/> _____ ft.		Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 51B SERIAL NO. _____ Temperature Meter: <input type="checkbox"/> Beckman <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u>							
Static Water Level <b>19.41</b> ft.		Sample Equipment <input type="checkbox"/> Same as Purge <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Stainless Bailor		Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter Water Level Meter: Solinst <input checked="" type="checkbox"/> HLA# _____							
Saturated Thickness <b>2.43</b> ft.		O.D.      LENGTH 1.85" <input type="checkbox"/> 2 ft. 1.85" <input type="checkbox"/> 3 ft. 3.75" <input type="checkbox"/> 4 ft. _____" <input type="checkbox"/> _____ ft.									
Casing Volume Boring <b>4.14</b> gal.		SCREENED INTERVAL <b>19.5-22</b> ft.									

Time	Number of Casing Volumes	Gallons Removed	OF	E.C. $\mu\text{mho/cm}$	pH	Disolved $\text{O}_2$ $\text{mg/liter}$ PID	Pump Rate gpm	Approx. Pump Depth ft.	Visual Description
1530	0	0	53.7	1780	7.20	0.1	0.0		Brown, very turbid with fines
1541	1	4.5	53.0	1870	7.16	0.3	0.0		Brown, very turbid with fines
1815	2	9.0	48.5	1771	7.24	0.2	0.0		Brown, less turbid with fines
Continued Development 1/12/94 MSR									
1029	3	13.5	51.5	1760	7.18	0.0	0.0		Brown, less turbid with fines
1922	4	18.0	50.4	1685	7.09	0.0	0.0		Brown, less turbid, with fines
Development discontinued as per the protocols established by Kerry & Mike Reust.									

Analysis Requested	Volatile Aromatics	Volatile Organohalogens	Organosulfur Compounds	Organochlorine Pesticides	Phosphonates	Hydrocarbons	Antibiotics	Nitrate/Nitrite (0.5 ml H <sub>2</sub> SO <sub>4</sub> )	Arsenic (0.5 ml HNO <sub>3</sub> )	Mercury (0.5 ml HNO <sub>3</sub> )	ICP Metals (0.5 ml HNO <sub>3</sub> )	Acid Extractables	Cyanide (1 ml NaOH)	GC/MS Volatiles	GC/MS SV/acid Extractables	N/Phos Pesticides	Health and Safety Officer Comments:		Sample Depth (cm):
																	Health and Safety Officer Signature:		Protective Level: C B Modified
Condition of Well, Remarks:																	Flush Mount		
Sampler Signature:																	Thomas E. Sernel		



## Well Development

Log Book # 18

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Well No.: <b>EI002MWO04</b>	Purge Equipment <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input checked="" type="checkbox"/> Stainless Bailor O.D. LENGTH 1.85" <input type="checkbox"/> 2 ft. 1.85" <input type="checkbox"/> 3 ft. 3.75" <input type="checkbox"/> 4 ft. 2.5" <input checked="" type="checkbox"/> 5 ft. SERIAL NO. _____	pH Meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Omega pH-65A <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 51B SERIAL NO. _____ Temperature Meter: <input type="checkbox"/> Beckman <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter Water Level Meter: Solinst <input checked="" type="checkbox"/> X H.A.S.	Date: <u>1/11/94</u> HLA Project No.: <u>21574, 01.09</u> <u>13</u> Location: <u>F&amp;H</u> <u>Indianapolis</u> Meter Calibration pH 7.00 = <u>2.0</u> at _____ °C Time _____ pH 10.00 = <u>10.0</u> at _____ °C Time _____ Conductance Standard: _____ µmhos/cm at 25° C Time _____ Measured Value: _____ µmhos/cm at _____ °C Time _____ Calculated Conductivity = Measured Conductance + (0.02) (measured conductance) (25° C - Actual Temp): _____ µmhos/cm at 25° C Time _____ Dissolved Oxygen _____ mg/l at _____ °C Time _____ Titration Results (Acid Concentration: <input type="checkbox"/> 0.16, <input type="checkbox"/> 1.8) pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks _____ Color _____
Casing Diameter <u>4</u> in.			
Casing Stickup <u>-3.125</u> ft.			
Total Well Depth <u>10.66/11.08</u> ft.			
Static Water Level <u>4.59</u> ft.	Sample Equipment <input type="checkbox"/> Same as Purge <input type="checkbox"/> Bennett Pump (Teflon Tubing) <input type="checkbox"/> ISCO Pump (Teflon Tubing) <input type="checkbox"/> Standard Pump (PVC Tubing) <input type="checkbox"/> Stainless Bailor O.D. LENGTH 1.85" <input type="checkbox"/> 2 ft. 1.85" <input type="checkbox"/> 3 ft. 3.75" <input type="checkbox"/> 4 ft. _____ <input type="checkbox"/> 5 ft. SERIAL NO. _____		
Saturated Thickness <u>6.07</u> ft.			
Casing Volume (Barrel) <u>12.73</u> gal.			
Screened Interval <u>6-11</u> ft.			

Time	Number of Casing Volumes	Gallons Removed	SP	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/l at 25°C	Pump Rate gpm	Approx. Pump Depth ft.	Visual Description
1021	0	0	53.0	614	7.84	0.2	0.0		Brown, very turbid with fines
1047	1	12.8	53.5	722	7.80	0.1	0.0		Brown, very turbid with fines
1209	2	25.6	56.7	761	7.70	0.3	0.0		Brown, less turbid with fines
1512	3	39	54.6	735	7.63	0.3	0.0		Brown, less turbid with fines
1617	4	52	52.4	633	7.66	0.2	0.0		Brown, less turbid with fines
1748	5	65	52.6	630	7.65	0.2	0.0		Slightly turbid consistent

Analysis Requested Volatile Aromatics Volatile Organohalogenes Organosulfur Compounds Organochlorine Pesticides Phosphonates Hydrocarbons Anions Nitrate/Nitrite (0.5 ml H <sub>2</sub> SO <sub>4</sub> ) Arsenic (0.5 ml HNO <sub>3</sub> ) Mercury (0.5 ml HNO <sub>3</sub> ) PCB Metals (0.5 ml HNO <sub>3</sub> ) Acid Extractables Cyanide (1 ml NaOH) GC/MS Volatiles GC/MS SV/ACD Extractables NitroPhos Pesticides	Health and Safety Officer Comments:	Sample Depth (cm):
	Health and Safety Officer Signature:	Protective Level: <u>① C B</u> <u>modified</u>
	Condition of Well, Remarks: <u>High Mount</u> Sampler Signature: <u>Mous E. Jernel</u>	

F 1125.1  
Harding Lawson Associates

## Well Development

## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <u>ELC 3 MW 001</u> Casing Diameter <u>4.00 in.</u> Casing Stickup <u>2.10 ft.</u> Total Well Depth (from TOC) <u>14.69/14.54 ft.</u> Static Water Level (from TOC) <u>5.52 ft.</u> Water Thickness <u>9.17 ft.</u> Casing Volume <u>14.16 gal.</u> <u>55 gal = 76.76 gal.</u> Screened Interval (from GS) <u>7 - 12 ft.</u> Purge Containerized? <u>55 gallon drum</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Asm Staging Area</u>		<b>Purge Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input checked="" type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO. <u>    </u>		<b>Analytical Equipment</b> <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9110E</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input type="checkbox"/> Other <u>    </u> SERIAL NO. <u>    </u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>    </u> <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9110E</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>		Sampler's Initials <u>DG</u> Time <u>16:00</u> Date <u>1/17/94</u> <b>Meter Calibration</b> pH <u>4.00</u> = <u>3.99</u> at <u>62.1</u> °C Time <u>1430</u> pH <u>7.00</u> = <u>6.96</u> at <u>62.0</u> °C Time <u>1432</u> Conductance Standard: <u>    </u> µmhos/cm at 25°C Time <u>    </u> Measured Value: <u>    </u> µmhos/cm at 25°C Time <u>    </u> Dissolved Oxygen Calibrated to <u>    </u> mg/l at <u>    </u> °C Time <u>    </u> Alkalinity Titration Results (Acid Concentration: <u>0.16N</u> , <u>1.6N</u> ) Start Point <u>    </u> pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks <u>    </u> <u>    </u> <u>    </u> <u>    </u> Color <u>    </u> <u>    </u> <u>    </u> <u>    </u> Sample Depth: (ft.) <u>    </u> <u>    </u> <u>    </u> <u>    </u>				
Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Disolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1610	0	0	5.52	45.0	675	7.20	0.0	0		brown, cloudy, turbid, stringy
1645	1	14.0	13.50	50.7	670	7.45	0.0	0		Same as above
1040	1.57	22.0	-	36.3	1360	7.32	0.0	0.0		LI II
1317	2	28.0	-	41.1	1342	6.72	0.0	0.0		brown, cloudy, some string
1324	2.29	32.0	-	41.8	1379	6.62	0.0	0.0		brown, cloudy, some string
1608	2.71	33.0	-	43.8	1382	6.59	0.0	0.0		brown, cloudy, some string
Development discontinued based on established protocols										
<b>Analyses Requested (see COC)</b> OC Samples: <u>GC/MS</u> <u>Full Suite</u> <u>Partial Suite (explain)</u> <u>Rinse Blank</u> <u>Field Blank</u> <u>Trip Blank</u> Additional Analyses: <u>    </u>						<input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip Initial Readings: TOC <u>0.0</u> BZ <u>0.0</u> Bkgnd <u>0.0</u> Sample Readings: TOC <u>    </u> BZ <u>    </u> Bkgnd <u>    </u> Protective Level: <u>B</u> <u>C</u> <u>(D)</u> SERIAL NO. <u>NA930114</u> HSO Signature: <u>    </u> Condition of Well, Remarks: <u>    </u> Sampler's Signature: <u>    </u>				
Additional Comments: <u>* Note discrepancy between initial and final well depth.</u>										

F 1125.1

Harding Lawson Associates *Development*

Task 01.09.13

Log Book # 18

## GROUNDWATER SAMPLING FIELD DATA SHEET

Job # 21574

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Well ID. No. <b>EI003MW002</b>	Purge Equipment <input checked="" type="checkbox"/> Other <b>4" Stainless Bailer</b>	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <b>Hydrc 910</b> SERIAL NO. <b>2451</b>	Sampler's Initials <b>DCE</b>	Time See Below	Date <b>01/30/94</b>
Casing Diameter <b>4</b> in.	<input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in.	Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <b>Hydrc 910</b> SERIAL NO. <b>2451</b>	Meter Calibration pH <b>7</b> = <b>7.04</b> at <b>15</b> °C <b>0730</b> Time pH <b>4</b> = <b>4</b> at <b>15</b> °C <b>0730</b> Time		
Casing Stickup <b>1.59</b> ft.	<input type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft.	Disolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. _____	Conductance Standard: <b>1413</b> µmhos/cm at 25°C Time Measured Value: _____ µmhos/cm at 25°C		
Total Well Depth (from TOC) <b>11.22</b> ft. <b>DCE</b>	Sample Equipment <input type="checkbox"/> Other	Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <b>Hydrc 910</b> SERIAL NO. <b>2451</b>	Dissolved Oxygen Calibrated to _____ mg/l at _____ °C		
Static Water Level (from TOC) <b>2.67</b> ft.	<input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in.	Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter	Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b>		
Water Thickness <b>3.55</b> ft.	<input type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft.	Water Level Meter: <input type="checkbox"/> Solinst SERIAL NO. _____	#Clicks		
Casing Volume <b>7.27</b> gal.	SERIAL NO. _____		Color		
Screened Interval (from GS) ft.			Sample Depth: (ft.)		
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>55 gallon drum</b>					

Time	Number of Casing Volumes	Gallons Removed	7°C Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
11:15	0	0	2.61	49.6	518	7.57				Slightly Turbid
11:30	1	7.3	2.65	44.5	492	7.56				Muddy
11:37	2	14.6	2.71	44.0	481	7.64				Muddy
11:45	3	21.9	2.82	44.4	491	7.64				A little less muddy
11:53	4	29.2	2.91	44.4	486	7.65				Same as above
12:02	5	36.5	2.82	44.3	492	7.70				Still cloudy with silt
12:15	6	43.8	3.61	44.3	491	7.71				Murky
12:25	7	51.1	2.87	45.1	495	7.70				Still very Murky
12:35	8	58.4	2.90	44.2	490	7.75				Murky
12:45	9	65.7	3.10	44.5	495	7.74				Murky

Analyses Requested (see COC) OC Samples: GC/MS Additional Analyses:	Full Suite Rinse Blank	Partial Suite (explain) Field Blank Trip Blank	Initial Readings: <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input type="checkbox"/> Microtip TOC _____ BZ _____ Bkgnd _____	Sample Readings: TOC _____ BZ _____ Bkgnd _____
Additional Comments: <i>Stopped development after 9 volumes because the visual appearance did not appear to substantially change with volume bailed.</i>			SERIAL NO. _____ HSO Signature: _____ Condition of Well, Remarks: _____ Sampler's Signature: <i>Dan E. [Signature]</i>	

## Well Development

M. Rend  
2/9/94

1123.1  
Richard Larson Associates

## GROUNDWATER SAMPLING FIELD DATA SHEET

Development Log Box 20  
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Project ID: No. **EIG03MW003**  
 Casing Diameter **4** in.  
 Casing Suckup **1.32** ft.  
 Total Well Depth (from TOC) **11.32** ft. after  
 Static Water Level (from TOC) **7.43** ft.  
 Water Thickness **3.89** ft.  
 Casing Volume **2.6** gal.  
 Screened Interval (from GS) **6.5 - 11.5** ft.  
 Pump Contaminized? ☐ Yes ☒ No Destination:

Purge Equipment  
☐ Other  
☐ 1.40" Bennett Pump (Teflon Tubing)  
☐ 1.80" Bennett Pump (Teflon Tubing)  
☐ Meyers Pump (PVC Tubing)  
☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.  
☒ Stainless Bailer  
 O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"  
 LENGTH ☐ 2 ft. ☒ 3 ft. ☐ 4 ft.  
 SERIAL NO.

Analytical Equipment  
 pH Meter:  
☐ Beckman pH 21  
☐ Beckman pH 10  
☐ Orion SA250  
☒ Other **Hydco**  
 SERIAL NO. **9304**  
 Conductivity Meter:  
☐ YSI Model 33  
☐ Orion 122  
☒ Other **Hydco**  
 SERIAL NO. **9304**  
 Dissolved Oxygen Meter:  
☒ YSI Model 308  
 SERIAL NO. **N/A**  
 Temperature Sensor:  
☐ Beckman pH 21  
☐ Beckman pH 10  
☐ Orion 122  
☒ Other **Hydco**  
 SERIAL NO. **9304**  
 Filtration Equipment:  
☒ GAC  
☒ Sintered Glass  
☐ Other  
 SERIAL NO. **13296**

Sample Date **2/8/94**  
 Meter Calibrated **18.01**  
 pH **4.3** at **18.0** °C  
 Conductivity **18.10** µmhos/cm at 25°C  
 Measured **18.10** µmhos/cm at 25°C  
 Dissolved Oxygen **N/A** mg/L at **N/A** °C  
 Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N)  
 Start Point **N/A**  
 pH **8.3** 5.1 4.5 4.5  
 Sample Depth (ft) **N/A**

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temperature	pH	Dissolved O <sub>2</sub> mg/L	Conductivity µmhos/cm	Alkalinity mg/L	Visual Description
18:18	trial	0	7.43	42.6°F	6.17	N/A	N/A	N/A	Dark Turbid w/ H <sub>2</sub> O Fines
18:30	1	6	10.49	43.9°F	6.26	N/A	N/A	N/A	Dark Turbid more H <sub>2</sub> O Fines
Dewatered after 6 gals < 1/3 bailer return - recharge 1-7 minutes									
Allowed water to return to static W.L. 7.43									
20:00	2 3/4	10	10.32	44.6°F	6.43	N/A	N/A	N/A	Dark Turbid more H <sub>2</sub> O Fines
Dewatered after 10 gals - Unable to recharge W.L. after 4 hrs - Too Dark - End of day -									

Analytical Requested (see CDD)  
 Sample: **GCMS**  
 Additional Analyses:  
 Additional Comments: **will continue development on 2/9/94**

Initial Readings:  
☐ H<sub>2</sub>O  
☐ OVA  
☒ Microtip  
 TOC **0.4**  
 BZ **N/A**  
 BOD **N/A**  
 Sample Readings:  
 TOC **N/A**  
 BZ **N/A**  
 BOD **N/A**  
 Protective Level: **B C D**  
 SERIAL NO. **13296**  
 HSO Signature **K. Westcott**  
 Condition of **Intact**  
 Sampler's Signature **K. Westcott**



GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. **EI003 MW003**

Casing Diameter **4** in.

Casing Stickup **7.32** ft.

Total Well Depth (from TOC) **11.34/11.67** ft.

Static Water Level (from TOC) **7.43** ft.

Water Thickness **3.91** ft.

Casing Volume **2.6/7.2** gal.

Screened Interval (from GS) **6.5 - 11.5** ft.

Purge Containerized? ☒ Yes ☐ No Destination: **55 Drums on site**

**Purge Equipment**

☐ Other

☐ 1.40" Bennett Pump (Jelion Tubing)

☐ 1.80" Bennett Pump (Jelion Tubing)

☐ Mayers Pump (PVC Tubing)

☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.

☐ Stainless Bailer

C.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"

LENGTH ☐ 2 ft. ☒ 3 ft. ☐ 4 ft.

SERIAL NO.

**Analytical Equipment**

☐ pH Meter:

☐ Beckman pH 21

☐ Beckman pH 10

☐ Orion SA250

☐ Other **Hydac**

SERIAL NO. **9110E**

☐ Conductivity Meter:

☐ YSI 3300

☐ Orion 121

☒ Other **Hydac**

SERIAL NO. **9110E**

☐ Dissolved Oxygen Meter:

☒ YSI Model 103

SERIAL NO. **N/A**

☐ Temperature Meter:

☐ Beckman pH 21

☐ Beckman pH 10

☐ Orion SA250

☒ Other **Hydac**

SERIAL NO. **9110E**

**Filtration Equipment:**

☒ Gaslick Fine Line Pump

☒ Gaslick Fine Line Filter

☒ Disposable Unit Filter

Water Level Station:

☒ Solis

SERIAL NO. **13296**

**Sample Equipment**

☐ Other

☐ 1.40" Bennett Pump (Jelion Tubing)

☐ 1.80" Bennett Pump (Jelion Tubing)

☐ Mayers Pump (PVC Tubing)

☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.

☐ Stainless Bailer

C.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"

LENGTH ☐ 2 ft. ☒ 3 ft. ☐ 4 ft.

SERIAL NO.

**Sample**

**Time** **10:02** **2/9/94**

**Meter** **10:02** **2/9/94**

**pH** **7.03** **18** **10:04**

**pH** **4.00** **18** **10:07**

**Conductance** **1413** **µmhos/cm at 25°C**

**Measured Value** **199** **µmhos/cm at 25°C** **10:10**

**Dissolved Oxygen** **1.4** **mg/l** **N/A**

**Alkalinity** **1.6N** **1.6N**

**Start Point** **N/A**

**pH** **6.5** **5.1** **4.8** **4.5**

**#Clicks** **N/A** **N/A** **N/A** **N/A**

**Color** **N/A** **N/A** **N/A** **N/A**

**Sample Depth** **N/A**

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temperature	pH	Dissolved O <sub>2</sub>	Conductance	Alkalinity	Visual Description
10:19	~2	64	10.67	41.8°F	1277	6.01	N/A	N/A	Brn. Turbid H <sub>2</sub> O Fines
12:28	~3	21	10.76	42.6°F	1295	6.22	N/A	N/A	Brn. Turbid H <sub>2</sub> O Fines
13:40	~4	28	10.43	42.0°F	1397	6.87	N/A	N/A	Brn. Turbid H <sub>2</sub> O Fines
16:08	5	35	9.62	43.8	1322	7.08	N/A	N/A	Brown less turbid fines
Completed 5 parameters for Developing - 36 gals total Purged - Annulus Vol -									

Analytical Requested (see COC)

GCMS

Additional Analyses:

Additional Comments:

Returned on 2/9/94 - to continue to develop well - ? Phoscond Gold weather causes Hydac to act up - readings - Digital Displays -

Sample Readings:

TOC 0.0  
BZ 0.0  
Blond 0.0

Sample Readings:

TOC 0.0  
BZ 0.0  
Blond 0.0

Protective Levels: 2 C D

SERIAL NO. NA 900127

ISO Signature: Mark K Westcott

Condition of Well: Intact - flush mount

Sample: Mark K Westcott

# Well Development

ELITE'S

MSK  
2/3/94

Harding Lawson Associates

## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. **E1003.MW04**

Casing Diameter **4** in.

Casing Stickup **1.86** ft.

Total Well Depth (from TOC) **20.89** ft.

Static Water Level (from TOC) **13.25** ft.

Water Thickness **7.64** ft.

Casing Volume **5.2 C.V.** **13** + C.V. gal.

Screened Interval (from GS) **13.5 - 18.5** ft.

Purge Contaminated? ☒ Yes ☐ No Destination: **55 gal drums - on site**

**Purge Equipment**

☐ Other

☐ 1.40" Bore Pump (Nylon Tubing)

☐ 1.80" Bore Pump (Nylon Tubing)

☐ Mayers Pump (PVC Tubing)

☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.

☒ Stainless Bailer

O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"

LENGTH ☒ 2 ft. ☐ 3 ft. ☐ 4 ft.

SERIAL NO. **N/A**

**Analytical Equipment**

pH Meter:

☐ Beckman pH 21

☐ Beckman pH 10

☐ Orion SA250

☒ Other

SERIAL NO. **9110E**

Conductivity Meter:

☐ YSI Model 33

☐ Orion 122

☒ Other

SERIAL NO. **9110E**

Dissolved Oxygen Meter:

☒ YSI Model 505

SERIAL NO. **N/A**

Temperature Meter:

☐ Beckman pH 21

☐ Beckman pH 10

☐ Orion SA250

☒ Other

SERIAL NO. **9110E**

Filtration Equipment:

☐ Geotech Peristaltic Pump

☐ Geotech 0.45 micron filter

☐ Disposable 0.45 micron filter

Water Level Meter:

☒ Solinst

SERIAL NO. **13276**

**Sample Equipment**

☐ Other

☐ 1.40" Bore Pump (Nylon Tubing)

☐ 1.80" Bore Pump (Nylon Tubing)

☐ Mayers Pump (PVC Tubing)

☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.

☐ Stainless Bailer

O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"

LENGTH ☐ 2 ft. ☐ 3 ft. ☐ 4 ft.

SERIAL NO. **N/A**

**Sample**

ML **19.05** **2-8-94**

Meter **18** **19:09**

pH **4.400** at **18** °C **19:12**

Conductance **1413** µmhos/cm at 25°C

Measured Value **19** µmhos/cm at 25°C **19:15**

Dissolved Oxygen **N/A** mg/l at **N/A** °C **N/A**

Calibrated **N/A** mg/l at **N/A** °C **N/A**

Alkalinity Titration (Acid Concentration: **0.16N** **1.6N**)

Start Point **N/A**

pH **8.3** **5.1** **4.8** **4.5**

#Clicks

Color **N/A** **N/A** **N/A** **N/A**

Sample Depth **N/A**

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temperature	pH	Dissolved O <sub>2</sub> mg/l	Apparent Depth ft.	Visual Description
19:16	initial	0	13.25	50.5°F	1394	6.25	N/A	N/A
19:29	1	13	16.78	49.1	1399	6.48	N/A	N/A
19:45	2	26	18.61	48.8	14	6.75	N/A	N/A
Well dewatered after 2 C.V. - 1/3 bailer full each time								
26 gals total Purged - will continue development								
on 2/9/94								

Analyses Requested (see COC)

GC/MS

Additional Analyses:

Additional Comments: **will** Continued Development  
Bent casing from 2/8/94 - 2/9/94  
Bailer will go down - too late to continue

**Initial Readings:**

☐ HNU

☐ OVA

☒ Microtip

**Sample Readings:**

TOC **0.0**

BZ **0.0**

Blind **0.0**

Protective Layer **B C D**

SERIAL NO. **NA900127**

HSO Signature: **Mark K. Westerb**

Condition of Well: **Intact - Cased - Pad - (Gravel)**

Sampler's Signature: **Mark K. Westerb**

# GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. **ET003 MW 048**

Casing Diameter **4** in.

Casing Stickup **1.86** ft.

Total Well Depth (from TOC) **20.89/20.98** ft.

Static Water Level (from TOC) **13.99** ft.

Water Thickness **6.9** ft.

Casing Volume **4.99** Annulus **13** volume gal.

Screened Interval (from GS) **13.5 - 18.5** ft.

Purge Contaminized? ☒ Yes ☐ No Destination: **55 gal Drums**

**Purge Equipment**

☐ Other

☐ 1.40" Bennett Pump (Teflon Tubing)

☐ 1.80" Bennett Pump (Teflon Tubing)

☐ Meyers Pump (PVC Tubing)

☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.

☒ Stainless Sucker

O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"

LENGTH ☐ 2 ft. ☐ 3 ft. ☐ 4 ft.

SERIAL NO. **N/A**

**Analytical Equipment**

pH Meter:

☐ Beckman pH 21

☐ Beckman pH 10

☐ Orion SA250

☐ Other **Hydax**

SERIAL NO. **9110E**

Conductivity Meter:

☐ YSI Model 33

☐ Orion 121

☐ Other **Hydax**

SERIAL NO. **9110E**

Dissolved Oxygen Meter:

☐ YSI Model 508

SERIAL NO. **9110E**

Temperature Meter:

☐ Beckman pH 21

☐ Beckman pH 10

☐ Orion 121

☐ Other **Hydax**

SERIAL NO. **9110E**

Filtration Equipment:

☐ Gelman Polystyrene Pump

☐ Gelman Polystyrene Filter

☐ Dispense Volume Control

Water Level Meter:

☒ Solinst

SERIAL NO. **13296**

**Sample Equipment**

☐ Other

☐ 1.40" Bennett Pump (Teflon Tubing)

☐ 1.80" Bennett Pump (Teflon Tubing)

☐ Meyers Pump (PVC Tubing)

☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.

☒ Stainless Sucker

O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75"

LENGTH ☐ 2 ft. ☐ 3 ft. ☐ 4 ft.

SERIAL NO. **N/A**

**Sample**

ML **40** Date **2-9-94**

Meter

pH **6.8** Time **0800**

pH **4.2** Time **0802**

Conductance **1443**  $\mu\text{mhos/cm at } 25^\circ\text{C}$

Measured Value **1446**  $\mu\text{mhos/cm at } 25^\circ\text{C}$  Time **0815**

Dissolved Oxygen

Calibrated to **1.0** mg/l at **N/A**  $^\circ\text{C}$  **N/A**

Alkalinity Titration (Acid Concentration: 0.16N, 1.6N)

Start Point

pH **8.3** **5.1** **4.8** **4.5**

#Clicks

Color **N/A** **N/A** **N/A** **N/A**

Sample Depth

Time	Number of Casing Volumes	Gallons Removed	Water Level	pH	Dissolved O <sub>2</sub>	Alkalinity	Visual Description
8:58	3	39	13.99	50.0	130	6.88	Brn silty sand Turbid - Fines
9:07	4	52	15.00	50.8	128	6.91	Brn silty more Turbid - Fines
9:26	5	65	16.79	48.2	1328	6.97	Brn silty more Turbid - Fines
			19.16				
Well dewatered after 3 purge vols - completed - well development 13 gals x 5 = 65 gals total - purged -							

Analyses Requested (see COC)

CO Samples: GCMS

Additional Analyses:

Additional Comments:

Bent casing - Development

**Initial Readings:**

☐ HNU

☐ OVA

☒ Microtip

**Sample Readings:**

TOC **N/A**

BZ **N/A**

Blind **N/A**

Protective Level: **B C D**

SERIAL NO. **13296**

HSD Signature: **Mark Westhoff**

Condition of Well: **intact - cased - bent casing**

Sampler's Signature: **Mark Westhoff**

F 1125.1

Harding Lawson Associates

## GROUNDWATER SAMPLING FIELD DATA SHEET

Well Development

Task 01.09.13

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Well ID. No. <b>ET004MW001</b>		<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" <input type="checkbox"/> 3.5" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input checked="" type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO.		Analytical Equipment <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>930Y</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>930Y</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO.		Sampler's Initials <b>MES</b>		Time <b>1240</b>		Date <b>1/18/94</b>	
Casing Diameter <b>4</b> in.		Casing Pickup <b>2.17</b> ft.		Total Well Depth (from TOC) <b>26.26 / 26.82</b> ft.		<b>Meter Calibration</b> pH <u>7.01</u> = <u>7.01</u> at <u>64.3</u> °C Time <u>0830</u> pH <u>10.01</u> = <u>10.01</u> at <u>64.3</u> °C Time <u>0830</u> Conductance Standard: _____ μmhos/cm at 25°C Time Measured Value: _____ μmhos/cm at 25°C Time					
Static Water Level (from TOC) <b>15.83</b> ft.		Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" <input type="checkbox"/> 3.5" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO.		Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>930Y</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO.		Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color					
Water Thickness <b>10.43</b> ft.		Casing Volume <b>18.09</b> gal.		Screened Interval (from GS) <b>14.35 - 24.4</b> ft.		Sample Depth: (ft.)					
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drum</u>											

Time	Number of Pumping Volumes	Gallons Removed	Water Level	Temp °C	E.C. μmhos/cm	pH	TD Dissolved Oxygen mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1311	0	0		32.8	1460	7.09	0.0	0.0		Greyish-brown very turbid, many fines
1331	1	18		36.8	1465	7.30	0.0	0.0		Greyish-brown very turbid, many fines
1551	2	36		38.8	1815	7.05	0.0	0.0		Greyish-brown very turbid, many fines
1721	3	54		37.3	1840	6.92	0.0	0.0		Greyish-brown turbid, fine
1021	4	72		57.3	1405	6.75	0.0	0.0		Greyish-brown cloudy, fine
1354	5	90		56.7	1394	6.65	0.0	0.0		Greyish-brown cloudy, some fine

<b>Analyses Requested (see COC)</b> GC/MS Additional Analyses:		Full Suite Rinse Blank		Partial Suite (explain) Field Blank      Trip Blank		Initial Readings: <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip TOC <u>0.0</u> BZ <u>0.0</u> Bkgrnd <u>0.0</u>		Sample Readings: TOC _____ BZ _____ Bkgrnd _____ Protective Level: B C <u>D</u> modified	
Additional Comments:						SERIAL NO. <u>NA930114</u> HSO Signature: <u>MES</u> Condition of Well, Remarks:			
Sampler's Signature: <u>Mano &amp; Lennel</u>									



GROUNDWATER SAMPLING FIELD DATA SHEET

Well ID. No. <b>EI004MW002</b>	<b>Purge Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" <input type="checkbox"/> 3.5" LENGTH <input checked="" type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> 5 ft. SERIAL NO.	<b>Analytical Equipment</b> <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO.	Sampler's Initials <u>MES</u> Time <u>1030</u> Date <u>1/17/94</u> <b>Meter Calibration</b> pH <u>7.01</u> = <u>7.01</u> at <u>60.8</u> °C Time <u>0800</u> pH <u>10.01</u> = <u>10.01</u> at <u>60.8</u> °C Time <u>0800</u> Conductance Standard: _____ µmhos/cm at 25°C Time _____ Measured Value: _____ µmhos/cm at 25°C Time _____ Dissolved Oxygen Calibrated to _____ mg/l at _____ °C Time _____ Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH 8.3 5.1 4.8 4.5 #Clicks _____ Color _____ Sample Depth: (ft.) _____
Casing Diameter <b>4</b> in.	<b>Sample Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" <input type="checkbox"/> 3.5" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> 5 ft. SERIAL NO.	<b>Static Water Level (from TOC)</b> <u>18.52</u> ft. <b>Water Thickness</b> <u>4.83</u> ft. <b>Casing Volume</b> <u>9.06</u> gal. <b>Screened Interval (from GS)</b> <u>15.8-20.9</u> ft.	Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drums</u>
Casing Stickup <b>2.33</b> ft.			
Total Well Depth (from TOC) <b>23.35</b> / <b>23.37</b> ft.			

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1101	0	0		49.0	1353	6.84	0.0	0.0		Brown, very turbid, many fines
1114	1	9		50.3	1395	6.80	0.0	0.0		Brown, very turbid, many fines
1137	2	18		53.0	1369	6.74	0.0	0.0		Brown, turbid, many fines
1221	3	27		57.0	1367	6.74	0.0	0.0		Brown, turbid, many fines
1243	4	36		57.5	1377	6.77	0.0	0.0		Brown, cloudy, fine
1317	5	45		57.0	1365	6.81	0.0	0.0		Brown, cloudy, some fines

<b>Analyses Requested (see COC)</b> QC Samples: GC/MS Rinse Blank Field Blank Trip Blank Additional Analyses:	Full Suite Partial Suite (explain) Initial Readings: TOC <u>6.0</u> BZ <u>0.0</u> Bkgnd <u>0.0</u> Sample Readings: TOC _____ BZ _____ Bkgnd _____ Protective Level: B C D Modified	SERIAL NO. <u>NA930114</u> HSO Signature: <u>Manas E. Jemel</u> Condition of Well, Remarks: Sampler's Signature: <u>Manas E. Jemel</u>
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GROUNDWATER SAMPLING FIELD DATA SHEET

Task 01.09.13

Log Book # 12

Job # 21574

Page 1 of 1

Well ID. No. <b>E1004 MW003</b> Casing Diameter <b>4</b> in. Casing Stickup <b>2.25</b> ft. Total Well Depth (from TOC) <b>26.82 / 26.86</b> ft. Static Water Level (from TOC) <b>13.05</b> ft. Water Thickness <b>13.77</b> ft. Casing Volume <b>20.76</b> gal. Screened Interval (from GS) <b>24.4 - 24.4</b> ft.		<b>Purge Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> 5 ft. SERIAL NO.		<b>Analytical Equipment</b> <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other Hydac SERIAL NO. 9304 <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other Hydac SERIAL NO. 9304 <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other Hydac SERIAL NO. 9304 <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input type="checkbox"/> Solinst SERIAL NO.		Sampler's Initials <b>MES</b> Time <b>1100</b> Date <b>1/17/94</b> <b>Meter Calibration</b> pH 7.01 = 7.01 at 60.8 °C 0800 pH 10.01 = 10.01 at 60.8 °C 0800 Conductance Standard: _____ µmhos/cm at 25°C Measured Value: _____ µmhos/cm at 25°C Dissolved Oxygen Calibrated to _____ mg/l at _____ °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH 8.3 5.1 4.8 4.5 #Clicks Color Sample Depth: (ft.)																																																																																																																										
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>Drums</b>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Time</th> <th>Number of Casing Volumes</th> <th>Gallons Removed</th> <th>Water Level</th> <th>Temp °C of</th> <th>E.C. µmhos/cm</th> <th>pH</th> <th>PID Dissolved O<sub>2</sub> mg/liter</th> <th>Pump Rate GPM</th> <th>Approx. Pump Depth ft.</th> <th>Visual Description</th> </tr> </thead> <tbody> <tr> <td>1339</td> <td>0</td> <td>0</td> <td></td> <td>50.9</td> <td>1040</td> <td>7.05</td> <td>0.0</td> <td>0.0</td> <td></td> <td>Brown, very turbid, many fines</td> </tr> <tr> <td>1357</td> <td>1</td> <td>21</td> <td></td> <td>50.2</td> <td>1085</td> <td>7.10</td> <td>0.0</td> <td>0.0</td> <td></td> <td>Brown, very turbid, many fines</td> </tr> <tr> <td>1523</td> <td>2</td> <td>42</td> <td></td> <td>47.0</td> <td>1110</td> <td>7.15</td> <td>0.0</td> <td>0.0</td> <td></td> <td>Brown, very turbid, many fines</td> </tr> <tr> <td>1652</td> <td>3</td> <td>63</td> <td></td> <td>48.1</td> <td>1160</td> <td>7.14</td> <td>0.0</td> <td>0.0</td> <td></td> <td>Brown, very turbid, many fines</td> </tr> <tr> <td>1503</td> <td>4</td> <td>84</td> <td></td> <td>35.8</td> <td>1390</td> <td>7.07</td> <td>0.0</td> <td>0.0</td> <td></td> <td>Brown, cloudy fines</td> </tr> <tr> <td>1620</td> <td>5</td> <td>105</td> <td></td> <td>38.1</td> <td>1470</td> <td>7.21</td> <td>0.0</td> <td>0.0</td> <td></td> <td>Brown, cloudy some fines</td> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>						Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C of	E.C. µmhos/cm	pH	PID Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description	1339	0	0		50.9	1040	7.05	0.0	0.0		Brown, very turbid, many fines	1357	1	21		50.2	1085	7.10	0.0	0.0		Brown, very turbid, many fines	1523	2	42		47.0	1110	7.15	0.0	0.0		Brown, very turbid, many fines	1652	3	63		48.1	1160	7.14	0.0	0.0		Brown, very turbid, many fines	1503	4	84		35.8	1390	7.07	0.0	0.0		Brown, cloudy fines	1620	5	105		38.1	1470	7.21	0.0	0.0		Brown, cloudy some fines																																												
Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C of	E.C. µmhos/cm	pH	PID Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description																																																																																																																						
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1652	3	63		48.1	1160	7.14	0.0	0.0		Brown, very turbid, many fines																																																																																																																						
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<b>Analyses Requested (see COC)</b> QC Samples: GC/MS Additional Analyses: Additional Comments:						Full Suite Rinse Blank Partial Suite (explain) Field Blank Trip Blank <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip Initial Readings: TOC 0.2 BZ 0.0 Bkgnd 0.0 Sample Readings: TOC BZ Bkgnd Protective Level: B C D modified SERIAL NO. NA93014 HSO Signature: <i>Marcus E. Jensen</i> Condition of Well, Remarks: Sampler's Signature: <i>Marcus E. Jensen</i>																																																																																																																										

F 1125.1  
Harding Lawson Associates

Well Development

Task W01.09.13 Log Book # 18  
Job # 21574 Page 1 of 1

## GROUNDWATER SAMPLING FIELD DATA SHEET

Well ID. No. <u>W0104MWO04</u> Casing Diameter <u>4</u> in. Casing Stickup <u>-0.36</u> ft. Total Well Depth (from TOC) <u>19.89 / 19.9</u> ft. Static Water Level (from TOC) <u>14.16</u> ft. Water Thickness <u>5.73</u> ft. Casing Volume <u>10.55</u> gal. Screened Interval (from GS) <u>14.8-19.9</u> ft. Purge Contaminized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drum</u>	<b>Purge Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" <input type="checkbox"/> 3.5" LENGTH <input checked="" type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO. _____	<b>Analytical Equipment</b> <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. _____ <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO. _____	Sampler's Initials <u>MEC</u> Time <u>1540</u> Date <u>1/7/94</u> <b>Meter Calibration</b> pH <u>7.01</u> = <u>7.01</u> at <u>60.8</u> °C Time <u>0800</u> pH <u>10.01</u> = <u>10.01</u> at <u>60.8</u> °C Time <u>0800</u> Conductance Standard: _____ µmhos/cm at 25°C Time _____ Measured Value: _____ µmhos/cm at 25°C Time _____ Dissolved Oxygen Calibrated to _____ mg/l at _____ °C Time _____ Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks _____ Color _____ Sample Depth: (ft.) _____
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Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °F	E.C. µmhos/cm	pH	DO mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1608	0	0		52.4	2270	6.82	0.4			Brown, very turbid, many fines
1619	1	10.5		50.7	2490	6.83	0.4			Brown, very turbid, many fines
1717	2	21		53.1	2490	6.81	0.4			Brown, turbid, fines
1423	3	31.5		35.8	3490	7.05	0.2			Brown, turbid, fines
1609	4	42		35.8	3440	7.01	0.4			Brown, cloudy, fines
1654	5	52.5		34.8	3400	6.96	0.5			Brown, cloudy, some fines

<b>Analyses Requested (see COC)</b> QC Samples: <u>GC/MS</u> <u>Rinse Blank</u> <u>Field Blank</u> <u>Trip Blank</u> Additional Analyses: Additional Comments:	<b>Initial Readings:</b> <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip TOC <u>1000.1</u> BZ <u>0.0</u> Bkgnd <u>0.0</u> <b>Sample Readings:</b> TOC _____ BZ _____ Bkgnd _____ <b>Protective Level:</b> B <u>C</u> <u>D</u> Mod. F.P.D. SERIAL NO. <u>NA930114</u> HSO Signature: <u>Marino E. Jemel</u> Condition of Well, Remarks: Sampler's Signature: <u>Marino E. Jemel</u>
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Phase I EI Report  
IN4 210 090 003  
September 18, 1995

## **GROUNDWATER SAMPLING FORMS**

G.W. Sampling

EI Site 1

MSR  
2/4/94

F 1125.1

Harding Lawson Associates

Well Purge + Sample

Task G.W. SamplingLog Book # 14

## GROUNDWATER SAMPLING FIELD DATA SHEET

Job # 21574.01.10.13Page 1 of 1

Well ID. No. <b>ETCCIMWCC1</b>	<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Analytical Equipment <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9107E</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 1221 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9107E</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u> <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9107E</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Sampler's Initials <u>DSH</u> Time <u>1715</u> Date <u>2/2/94</u> <b>Meter Calibration</b> pH <u>7.01</u> = <u>7.00</u> at <u>17</u> °C Time <u>0958</u> pH <u>4.01</u> = <u>4.00</u> at <u>17</u> °C Time <u>0959</u> Conductance Standard: <u>1413</u> µmhos/cm at 25°C Measured Value: <u>1200</u> µmhos/cm at 25°C Time <u>0945</u> Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at <u>  </u> °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color Sample Depth: (ft.) <u>8.5</u>
Casing Diameter <u>4</u> in. Casing Stickup <u>1.79</u> ft. Total Well Depth (from TOC) <u>13.3</u> ft. <u>13.3/13.34</u> Static Water Level (from TOC) <u>4.88</u> ft. Water Thickness <u>8.42</u> ft. Casing Volume <u>13.8</u> gal. Screened Interval (from GS) <u>6-11</u> ft.	<b>Sample Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>55 gal. Drum</u>	

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Disolved O <sub>2</sub> mg/l	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
2/1/94 1600	Init. Parameters	0	—	51.6	619	7.24	0.0	0.0	Bailer	Cloudy, moderately turbid
1615	1	14.0	12.66	50.4	626	7.26	0.0	0.0	Bailer	Cloudy, moderately turbid
2/2/94 1632	Init. Parameters	—	5.41	46.5	543	7.95	0.1	0.0	Bailer	Slightly cloudy
1645	# 2	28.0	12.82	44.7	544	7.94	0.0	0.0	Bailer	Slightly cloudy
waited 1/2 hr to sample, water level came up to 12.62" Sampled at 1715 on 2/2/94										

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples: GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC 1.2  
 BZ 0.9  
 Bkgnd 0.9

Sample Readings:

 TOC 1.1  
 BZ 1.1  
 Bkgnd 1.1

 Protective Level:  
 B C 0

Additional Comments:

Only 2 borehole volumes taken cut due to low recharge  
 of well. Well sampled at 1715 on 2/2/94.

SERIAL NO. NA930114HSO Signature: Zerin A. Hodge modified

Condition of Well, Remarks:

Sampler's Signature: Zerin A. Hodge

## C.W. Well Sampling

Task Well Sampling (60) Log Book # 14  
Job # 21574, 01.10.13 Page 1 of 1

Job # 21574, 01.10.13 Page 1 of 1

2/1/4	
2/2/4	



# C.W. Sampling

EI Site 1

MSR  
2/4/94

F 1125.1  
Harding Lawson Associates

Task Well Sampling Log Book # 14  
Job # 21574/01.10.13 Page 1 of 1

## GROUNDWATER SAMPLING FIELD DATA SHEET

Well ID. No. <u>EI001MW003</u>		<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____		Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 500 SERIAL NO. <u>N/A</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>		Sampler's Initials <u>Dsh</u> Time <u>1422</u> Date <u>2/3/94</u> Meter Calibration pH <u>7.01</u> = <u>7.01</u> at <u>18.5</u> °C Time <u>0745</u> pH <u>4.01</u> = <u>4.01</u> at <u>18.5</u> °C Time <u>0748</u> Conductance Standard: <u>143</u> µmhos/cm at 25 °C Measured Value: <u>1238</u> µmhos/cm at <u>17</u> °C Time <u>0755</u> Dissolved Oxygen Calibrated to <u>N/A</u> at _____ °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks _____ Color _____ Sample Depth: (ft.) <u>8.5</u>									
Casing Diameter <u>4</u> in.		Casing Stickup <u>1.71</u> ft.		Total Well Depth (from TOC) <u>13.37</u> ft.		Static Water Level (from TOC) <u>4.95</u> ft.		Water Thickness <u>8.42</u> ft.		Casing Volume <u>13.8</u> gal.		Screened Interval (from GS) <u>6-11</u> ft.		Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>55 gal. Drum</u>	
Time		Number of Casing Volumes		Gallons Removed		Water Level		Temp °C		E.C. µmhos/cm		pH		Visual Description	
2/2/94 1225		Initial Parameters		—		4.95		53.8		656		7.73		Cloudy, moderately turbid	
1248		1		14		12.85		47.4		624		7.77		Slightly Cloudy	
2/3/94 1322		Initial Parameters		—		6.34		51.4		765		7.20		Clear, some silt	
1345		2		28		11.97		45.8		728		7.16		Slightly Cloudy	
Waited 1/2 hr for water level to come up to 6.46'. Sampled at 1422 on 2/3/94															
Analyses Requested (see COC) Full Suite Partial Suite (explain) OC Samples: GC/MS Rinse Blank Field Blank Trip Blank Additional Analyses: Initial Readings: <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip TOC <u>2.2</u> BZ <u>1.8</u> Bkgnd <u>1.8</u> Sample Readings: TOC <u>0.0</u> BZ <u>0.0</u> Bkgnd <u>0.0</u> Protective Level: B C <u>0</u> Additional Comments: Only two borehole volumes were taken out due to low recharge of well. Well sampled at 1422 on 2/3/94 SERIAL NO. <u>N/A930114</u> HSO Signature: <u>Teri A. Hody</u> Modified Condition of Well: Remarks: <u>Well in good condition</u> Sampler's Signature: <u>Teri A. Hody</u>															

EI Site 1

m RaA  
2/9/94

F 1125.1

Harding Lawson Associates

G.W. Well Purge + Sample

Task Well SamplingLog Book # 14

## GROUNDWATER SAMPLING FIELD DATA SHEET

Job # 21574, 01.10.13Page 1 of 1

Well ID. No. <u>EICC1MW004</u>	<b>Purge Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____	<b>Analytical Equipment</b> <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input type="checkbox"/> Other <u>H<sub>2</sub>OAC</u> SERIAL NO. <u>9107E</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u> <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotek Peristaltic Pump <input type="checkbox"/> Geotek 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Sampler's Initials <u>ASH</u> Time <u>1131</u> Date <u>2/3/94</u> <b>Meter Calibration</b> pH 7.01 = 7.01 at 18.5 °C 7:45 pH 4.01 = 4.01 at 18.5 °C 7:48 Conductance Standard: <u>1238</u> <u>14.3</u> <u>19.3</u> <u>25.0</u> <u>30.0</u> <u>35.0</u> <u>40.0</u> <u>45.0</u> <u>50.0</u> <u>55.0</u> <u>60.0</u> <u>65.0</u> <u>70.0</u> <u>75.0</u> <u>80.0</u> <u>85.0</u> <u>90.0</u> <u>95.0</u> <u>100.0</u> <u>105.0</u> <u>110.0</u> <u>115.0</u> <u>120.0</u> <u>125.0</u> <u>130.0</u> <u>135.0</u> <u>140.0</u> <u>145.0</u> <u>150.0</u> <u>155.0</u> <u>160.0</u> <u>165.0</u> <u>170.0</u> <u>175.0</u> <u>180.0</u> <u>185.0</u> <u>190.0</u> <u>195.0</u> <u>200.0</u> <u>205.0</u> <u>210.0</u> <u>215.0</u> <u>220.0</u> <u>225.0</u> <u>230.0</u> <u>235.0</u> <u>240.0</u> <u>245.0</u> <u>250.0</u> <u>255.0</u> <u>260.0</u> <u>265.0</u> <u>270.0</u> <u>275.0</u> <u>280.0</u> <u>285.0</u> <u>290.0</u> <u>295.0</u> <u>300.0</u> <u>305.0</u> <u>310.0</u> <u>315.0</u> 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Casing Diameter <u>4</u> in.	<b>Sample Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. 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<u>940.0</u> <u>945.0</u> <u>950.0</u> <u>955.0</u> <u>960.0</u> <u>965.0</u> <u>970.0</u> <u>975.0</u> <u>980.0</u> <u>985.0</u> <u>990.0</u> <u>995.0</u> <u>1000.0</u> Measured Value: <u>1238</u> <u>14.3</u> <u>19.3</u> <u>25.0</u> <u>30.0</u> <u>35.0</u> <u>40.0</u> <u>45.0</u> <u>50.0</u> <u>55.0</u> <u>60.0</u> <u>65.0</u> <u>70.0</u> <u>75.0</u> <u>80.0</u> <u>85.0</u> <u>90.0</u> <u>95.0</u> <u>100.0</u> <u>105.0</u> <u>110.0</u> <u>115.0</u> <u>120.0</u> <u>125.0</u> <u>130.0</u> <u>135.0</u> <u>140.0</u> <u>145.0</u> <u>150.0</u> <u>155.0</u> <u>160.0</u> <u>165.0</u> <u>170.0</u> <u>175.0</u> <u>180.0</u> <u>185.0</u> <u>190.0</u> <u>195.0</u> <u>200.0</u> <u>205.0</u> <u>210.0</u> <u>215.0</u> <u>220.0</u> <u>225.0</u> <u>230.0</u> <u>235.0</u> <u>240.0</u> <u>245.0</u> <u>250.0</u> <u>255.0</u> <u>260.0</u> <u>265.0</u> <u>270.0</u> <u>275.0</u> <u>280.0</u> <u>285.0</u> <u>290.0</u> <u>295.0</u> <u>300.0</u> <u>305.0</u> <u>310.0</u> <u>315.0</u> <u>320.0</u> <u>325.0</u> <u>330.0</u> <u>335.0</u> <u>340.0</u> <u>345.0</u> <u>350.0</u> <u>355.0</u> <u>360.0</u> <u>365.0</u> <u>370.0</u> <u>375.0</u> <u>380.0</u> <u>385.0</u> <u>390.0</u> <u>395.0</u> <u>400.0</u> <u>405.0</u> <u>410.0</u> <u>415.0</u> <u>420.0</u> <u>425.0</u> <u>430.0</u> <u>435.0</u> <u>440.0</u> <u>445.0</u> <u>450.0</u> <u>455.0</u> <u>460.0</u> <u>465.0</u> <u>470.0</u> <u>475.0</u> <u>480.0</u> <u>485.0</u> <u>490.0</u> <u>495.0</u> <u>500.0</u> <u>505.0</u> <u>510.0</u> <u>515.0</u> <u>520.0</u> <u>525.0</u> <u>530.0</u> <u>535.0</u> <u>540.0</u> <u>545.0</u> <u>550.0</u> <u>555.0</u> <u>560.0</u> <u>565.0</u> <u>570.0</u> <u>575.0</u> <u>580.0</u> <u>585.0</u> <u>590.0</u> <u>595.0</u> <u>600.0</u> <u>605.0</u> <u>610.0</u> <u>615.0</u> <u>620.0</u> <u>625.0</u> <u>630.0</u> <u>635.0</u> <u>640.0</u> <u>645.0</u> <u>650.0</u> <u>655.0</u> <u>660.0</u> <u>665.0</u> <u>670.0</u> <u>675.0</u> <u>680.0</u> <u>685.0</u> <u>690.0</u> <u>695.0</u> <u>700.0</u> <u>705.0</u> <u>710.0</u> <u>715.0</u> <u>720.0</u> <u>725.0</u> <u>730.0</u> <u>735.0</u> <u>740.0</u> <u>745.0</u> <u>750.0</u> <u>755.0</u> <u>760.0</u> <u>765.0</u> <u>770.0</u> <u>775.0</u> <u>780.0</u> <u>785.0</u> <u>790.0</u> <u>795.0</u> <u>800.0</u> <u>805.0</u> <u>810.0</u> <u>815.0</u> <u>820.0</u> <u>825.0</u> <u>830.0</u> <u>835.0</u> <u>840.0</u> <u>845.0</u> <u>850.0</u> <u>855.0</u> <u>860.0</u> <u>865.0</u> <u>870.0</u> <u>875.0</u> <u>880.0</u> <u>885.0</u> <u>890.0</u> <u>895.0</u> <u>900.0</u> <u>905.0</u> <u>910.0</u> <u>915.0</u> <u>920.0</u> <u>925.0</u> <u>930.0</u> <u>935.0</u> <u>940.0</u> <u>945.0</u> <u>950.0</u> <u>955.0</u> <u>960.0</u> <u>965.0</u> <u>970.0</u> <u>975.0</u> <u>980.0</u> <u>985.0</u> <u>990.0</u> <u>995.0</u> <u>1000.0</u> Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at _____ °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH 8.3 5.1 4.8 4.5 #Clicks _____ Color _____ Sample Depth: (ft.) <u>8</u>						
Casing Stickup <u>1.54</u> ft.									
Total Well Depth (from TOC) <u>10.25/10.24</u> ft.									
Static Water Level (from TOC) <u>1.54</u> ft.									
Water Thickness <u>8.66</u> ft.									
Casing Volume <u>14.6</u> gal.									
Screened Interval (from GS) <u>5.5-10.5</u> ft.									
Purge Contained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>55gal Drum</u>									

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	PID Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
2/2/94 1113	Init. Parameter	0	1.59	53.7	749	7.66	1.3 0.0	Bailer		Slightly Cloudy, some silt.
1131	1	15	9.20	43.6	717	7.61	0.4 0.0	Bailer	De-watered	Slightly Cloudy, some silt.
2/3/94 1024	Init. Parameter	—	2.22	42.7	727	6.19	0.1 0.0	Bailer		very slightly cloudy
1101	2	30	9.01	48.3	781	6.82	0.0 0.0	Bailer	De-watered	slightly cloudy
Waited 1/2 hr. to sample, water level came up to 3.58'										
Sampled at 1131 on 2/3/94										

## Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples



## G.W. Sampling

EI Site 2

M. Reast  
2/9/94

F 1125.1

Harding Lawson Associates

Task: G.W. Sampling

Log Book # 20

## GROUNDWATER SAMPLING FIELD DATA SHEET

Job # 21574.01.10.13

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Well ID. No. <b>E1002.MW001</b>	Purge Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. <b>N/A</b>	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Beckman pH 10 <input type="checkbox"/> Orion SA250 <input type="checkbox"/> Other <b>Hydac</b> SERIAL NO. <b>9304</b> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input type="checkbox"/> Other <b>Hydac</b> SERIAL NO. <b>9304</b> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <b>N/A</b> Temperature Meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Beckman pH 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <b>Hydac</b> SERIAL NO. <b>N/A</b> Titration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input checked="" type="checkbox"/> Disposal 0.45 micron filter Water Level Gauge: <input checked="" type="checkbox"/> Solinst SERIAL NO. <b>90236</b>	Sampler's Initials <b>MKW/MES</b>	Time <b>1505</b>	Date <b>2/7/94</b>
Casing Diameter <b>4</b> in.			Meter Calibration pH <b>7</b> = <b>7.03</b> at <b>18</b> °C <b>15.09</b> pH <b>4</b> = <b>4.00</b> at <b>18</b> °C <b>15.11</b> Conductance Standard: <b>1413</b> µmhos/cm at 25°C Measured Value: <b>1146</b> µmhos/cm at 25°C <b>15.15</b> Dissolved Oxygen Calibrated to <b>N/A</b> mg/l at <b>N/A</b> °C <b>N/A</b>		
Casing Stickup <b>-0.43</b> ft.			Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point <b>N/A</b> pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b>		
Total Well Depth (from TOC) <b>10.93</b> ft.			#Clicks <b>N/A</b> <b>N/A</b> <b>N/A</b> <b>N/A</b>		
Static Water Level (from TOC) <b>2.95</b> ft.			Color <b>N/A</b> <b>N/A</b> <b>N/A</b> <b>N/A</b>		
Water Thickness <b>7.98</b> ft.			Sample Depth (ft.) <b>8.5</b>		
Casing Volume <b>5.5</b> gal. + Annulus Vol <b>12.84</b> gal.					
Screened Interval (from GS) <b>6-11</b> ft.					
Purge Contaminized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>SS gal Drum</b>					

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °F	TOC pressure	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
15:30	initial	0	2.95	50.2°F	1539	6.15	N/A	N/A	N/A	cloudy Lt Brn silty H <sub>2</sub> O
15:34	1/4	3	7.51	50.7°F	1767	6.25	N/A	N/A	N/A	Lt Brn silty H <sub>2</sub> O
15:38	1/2	6	8.32	51.0°F	1754	6.52	N/A	N/A	N/A	Lt Brn silty more fines H <sub>2</sub> O
15:42	3/4	9	9.46	51.0°F	1760	6.66	N/A	N/A	N/A	Lt Brn silty more fines H <sub>2</sub> O
15:48	~1	~11	9.93	50.8°F	1736	6.76	N/A	N/A	N/A	Lt Brn silty more fines H <sub>2</sub> O
Well de-aired after ~1 casing volume + Annulus volume -										
Recharge rate ~ 1/6 minutes Awaited 80% recharge + Purged again										
16:29	1 3/4	~8	9.91	50.8°F	1776	6.84	N/A	N/A	N/A	Lt Brn silty H <sub>2</sub> O Turbid → Clearing
Awaiting Recharge to sample well										

Analysis Requested (see COC)

Full Suite

Partial Suite (perman.)

QC Samples: GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC **0.0**  
 BZ **0.0**  
 Bkgnd **0.0**

Sample Readings:

 TOC **N/A**  
 BZ **N/A**  
 Bkgnd **N/A**
Protective Level  
B C

Additional Comments:

 pH **>6** **<7**  
 paper
SERIAL NO. **NA900127**HSO Signature: **Mark Westcott**Condition of Well: **Good - intact Flush mount**Sampler's Signature: **Mark Westcott**

Task: 6. W Sampling  
 Job #: 21574.01.10.13

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Well ID. No. **E1002 MW001**

Casing Diameter **4** in.

Casing Stickup **10.93** ft.

Static Water Level (from TOC) **2.95** ft.

Water Thickness **7.98** ft.

Casing Volume **25.52** gal.

Screened Interval (from GS) **6-11** ft.

Purge Equipment  
☐ Other  
☐ 1.40" Bennett Pump (Teflon Tubing)  
☐ 1.80" Bennett Pump (Teflon Tubing)  
☐ Mayers Pump (PVC Tubing)  
☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.  
☐ Stainless Bailor  
O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75" ☐ LENGTH ☐ 2 ft. ☒ 3 ft. ☐ 4 ft.  
SERIAL NO. **N/A**

Sample Equipment  
☐ Other  
☐ 1.40" Bennett Pump (Teflon Tubing)  
☐ 1.80" Bennett Pump (Teflon Tubing)  
☐ Mayers Pump (PVC Tubing)  
☐ Grundfos Pump (Neoprene Tubing) ☐ 2 in. ☐ 3 in.  
☒ Stainless Bailor  
O.D. ☐ 1.65" ☐ 1.85" ☒ 3.75" ☐ LENGTH ☐ 2 ft. ☒ 3 ft. ☐ 4 ft.  
SERIAL NO. **N/A**

Analytical Equipment  
pH Meter:  
☐ Beckman pH 21  
☐ Beckman pH 10  
☐ Orion SA250  
☒ Other **Hydral**  
SERIAL NO. **9304**  
Conductivity Meter:  
☐ YSI Model 55  
☐ Orion 122  
☐ Orion **Hydral**  
SERIAL NO. **9304**  
Dissolved Oxygen Meter:  
☐ YSI Model 50B  
SERIAL NO. **N/A**  
Temperature Meter:  
☐ Beckman pH 21  
☐ Beckman pH 10  
☐ Orion SA250  
☒ Other **Hydral**  
SERIAL NO. **9304**  
Filtration Equipment:  
☐ Gecton Peristaltic Pump  
☐ Gecton 45 micron filter  
☐ Gecton 100 micron filter  
☒ Water Level Meter  
☒ Solinst  
SERIAL NO. **90236**

Sampler's Initials **MEW/MES** Time **1505** Date **2/7/94**

Water Calibration  
pH **7** = **7.03** at **18.0** °C Time **15:09**  
pH **4** = **4.00** at **18.0** °C Time **15:11**  
Conductance Standard: **1413** µmhos/cm at 25°C  
Measured Value: **1146** µmhos/cm at 25°C Time **15:15**  
Dissolved Oxygen  
Calibrated to **N/A** mg/l at **N/A** °C **N/A**  
Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N)  
Start Point **N/A**  
pH **8.5** **5.1** **4.8** **4.5**  
#Clicks  
Color **N/A** **N/A** **N/A** **N/A**  
Sample Depth: (ft.) **8.5**

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1707	Final Parameter	5.23	50.1	17.20	6.86	N/A	N/A	N/A	1st 6 in. silty H <sub>2</sub> O clearing
1707	Completed Sampling - Full suite - after sufficient recharge.								

Analyses Requested (see COC) **Full Suite** Partial Suite (explain):  
QC Samples: GC/MS Rinse Blank Field Blank Trip Blank  
Additional Analyses:  
Additional Comments: **Well was purged & de-aerated - Twice - Awaited recharge < 4 hrs - for total recharge - then sampled well**  
**pH paper > 6 < 7**

Initial Readings:  
☐ HNu  
☐ OVA  
☒ Microtip  
TOC **0.0**  
BZ **0.0**  
Bkgnd **0.0**

Sample Readings:  
TOC **0.4**  
BZ **0.0**  
Bkgnd **0.0**

Protective Levels  
B C **D**

SERIAL NO. **NA900127**  
HSO Signature: **Mark K Westcott**  
Condition of Well: **intact - Flush mound.**  
Sampler's Signature: **Mark K Westcott**

## G.W. Sampling

EI Site 2

MSR  
2/9/94

F 1125.1

Harding Lawson Associates

Task GW SAMPLINGLog Book # 20Job # 21574, 01.10.13Page 1 of 2

## GROUNDWATER SAMPLING FIELD DATA SHEET

Well ID. No. <b>EC002MW002</b>	<input type="checkbox"/> Purge Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> _____ ft. SERIAL NO. _____	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>H40AC</u> SERIAL NO. <u>9304</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>H40K</u> SERIAL NO. <u>9304</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>NA</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>H40K</u> SERIAL NO. <u>9304</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>92036</u>	Sampler's Initials: <u>MOB</u> Time: <u>16:50</u> Date: <u>2-5-94</u> Meter Calibration pH <u>7.01</u> = <u>7.03</u> at <u>18</u> °C Time <u>7:30</u> pH <u>4.01</u> = <u>4.00</u> at <u>18</u> °C Time <u>7:30</u> Conductance Standard: <u>1413</u> µmhos/cm at 25°C Time _____ Measured Value: <u>1119</u> µmhos/cm at 25°C Time <u>7:30</u> Dissolved Oxygen Calibrated to <u>NA</u> mg/l at _____ °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks <u>NA</u> <u>NA</u> <u>NA</u> <u>NA</u> Color _____ Sample Depth: (ft.) <u>10.0</u>
Casing Diameter <u>4</u> in. Casing Stickup <u>-2.55 = .34 ft</u> Total Well Depth (from TOC) <u>12.03</u> ft. Static Water Level (from TOC) <u>6.38</u> ft. Water Thickness <u>5.65</u> ft. Casing Volume <u>4</u>   <u>10</u> gal. Screened Interval (from GS) <u>7.5 - 12.5</u> ft.	Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> _____ ft. SERIAL NO. _____	Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drum @ MW004</u>	

Estimated  
Estimated  
nr

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °F	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
16:51	unt	0	6.38	43.6	911	6.31		B		clear
16:54	.4	4	9.15	47.7	772	6.33				Clear - some Fines SL Turbid
16:56	.6	6	11.60	49.6	943	6.38				lt. Brn. Fines SL Turbid
16:58	.7	7	11.70	48.8	901	6.44				BRN - many Fine Turbid
			(17:03 - WL = 10.0' recovered 1.7 feet in 5 min)							
17:21	1.2	12	11.55	44.0	837	6.44				BRN - many Fines Turbid

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples: GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC 3.1  
 BZ 7  
 Bkgrd 2

Sample Readings:

 TOC \_\_\_\_\_  
 BZ \_\_\_\_\_  
 Bkgrd \_\_\_\_\_

 Protective Level:  
 B C 0 mod

Additional Comments:

Barrell Left @ site  
 Developer Form says T.D. @ 2335 from the  
 Dewatered twice - will sample 2-6-94

SERIAL NO. PA 920436

HSO Signature:

Condition of Well, Remarks:

 Intact - Flush Mount  
 Cement @ casing coming loose

Sampler's Signature:

M. O. B.

## GROUNDWATER SAMPLING FIELD DATA SHEET

Task 6.W SamplingLog Book # 20Job # 21574, 01.10.13Page 2 of X2

Well ID. No. <u>EI 002 MW 002</u>	<input type="checkbox"/> Purge Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9304</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>Hydax</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>92036</u>	Sampler's Initials <u>MW/MES</u> Time <u>08:37</u> Date <u>2-7-94</u> Meter Calibration pH <u>7</u> = <u>7.00</u> at <u>42.9</u> °C Time <u>8:00</u> pH <u>4</u> = <u>4.06</u> at <u>42.9</u> °C Time <u>8:02</u> Conductance Standard: <u>1413</u> µmhos/cm at 25°C Measured Value: <u>1146</u> µmhos/cm at 25°C Time <u>8:10</u> Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at <u>N/A</u> °C Time <u>N/A</u> Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point <u>N/A</u> pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color <u>N/A</u> <u>N/A</u> <u>N/A</u> <u>N/A</u> Sample Depth: (ft.) <u>10.0</u>
Casing Diameter <u>4</u> in. Casing Stickup <u>-34</u> ft. Total Well Depth (from TOC) <u>12.03</u> ft. Static Water Level (from TOC) <u>6.39</u> ft. Water Thickness <u>5.64</u> ft. Casing Volume <u>400/10</u> Annular Vol. gal. Screened Interval (from GS) <u>7.5 - 12.5</u> ft.	Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Purge Contained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drum (55 gal)</u>	

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
9:05	initial	0	6.39	48.0°F	1159	6.02	N/A	B	N/A	clear H <sub>2</sub> O
9:08	1/4	2	9.75	47.2°F	1082	6.11	N/A	B	N/A	Lt Brn H <sub>2</sub> O Turbid some fines
9:13	1/2	4	9.70	48.2	1100	6.24	N/A	B	N/A	Lt Brn some Turbid H <sub>2</sub> O. Fines
9:17	3/4	6	10.21	49.8	1032	6.39	N/A	B	N/A	Lt Brn some Turbid H <sub>2</sub> O. Fines
9:21	1	8	10.81	47.5	940	6.63	N/A	B	N/A	Lt Brn some Turbid H <sub>2</sub> O. Fines
9:24	1 1/4	10	11.04	48.6	965	6.66	N/A	B	N/A	Lt Brn some Turbid H <sub>2</sub> O. Fines
	well dewatered after ~10 gals. - Allowed to recharge before sampling									
9:47	Final Parameters		10.00	47.5	960	6.62	N/A	B	N/A	Lt Brn cloudy H <sub>2</sub> O
9:45	Sampled Full suite -									

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

GC Samples: GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

Additional Comments:

pH paper &gt; 6 &lt; 7

As per Mike Reust - well was dewatered on 2/5/94  
 slowly recharged & purged again & 2 well vols -  
 well was not sampled on 2/6/94 - by other crew -  
 MW/MES returned as instructed to purge additional vol &  
 allow well to recharge & sample well -

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC 10.2  
 BZ 0.0  
 Bkgnd 0.0

Sample Readings:

 TOC 0.4  
 BZ 0.0  
 Bkgnd 0.0

Protective Level:

B C ( )

SERIAL NO. PA 920436HSO Signature: Mark K Westcott

Condition of Well, Remarks:

Intact - Flush mount

Sampler's Signature: Mark K Westcott

EI Site 2

Harding Lawson Associates

Task GW SAMPLING

Log Book # 20

# GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <b>FL002 MW0083</b>		Purge Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Mayers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.		Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <b>HYDRA</b> SERIAL NO. <b>9304</b> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <b>HYDRA</b> SERIAL NO. <b>9304</b> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <b>NA</b> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <b>HYDRA</b> SERIAL NO. <b>9304</b> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <b>12036</b>		Sampler's Initials <b>MOB</b> Time <b>16:00</b> Date <b>2-5-94</b> Meter Calibration pH <b>7.01</b> = <b>7.03</b> at <b>18</b> °C Time <b>7:30</b> pH <b>4.01</b> = <b>4.00</b> at <b>18</b> °C Time <b>7:30</b> Conductance Standard: <b>143</b> µmhos/cm at 25°C Time Measured Value: <b>119</b> µmhos/cm at 25°C Time <b>182</b> Dissolved Oxygen Calibrated to <b>NA</b> mg/l at °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b> #Clicks <b>11A</b> <b>NA</b> <b>NA</b> <b>NA</b> Color Sample Depth: (ft.)	
Casing Diameter <b>4</b> in. Casing Stickup <b>- 2.5"</b> ft. Total Well Depth (from TOC) <b>21.84</b> ft. Static Water Level (from TOC) <b>19.18</b> ft. Water Thickness <b>2.66</b> ft. Casing Volume <b>4.14</b> gal. Screened Interval (from GS) <b>19.5 - 22</b> ft. Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>Drum @ MW04</b>		Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Mayers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input type="checkbox"/> Stainless Bailor O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.		Time <b>16:00</b> Number of Casing Volumes <b>Init</b> Gallons Removed <b>0</b> Water Level <b>19.18</b> Temp <b>52.9</b> E.C. <b>1245</b> µmhos/cm pH <b>6.25</b> Dissolved O <sub>2</sub> mg/liter Pump Rate GPM Approx. Pump Depth ft. Visual Description <b>Clear - Few Fines</b> <b>Slight Turbidity</b> <b>lt. Brn - Few Fines</b> <b>SL. Turbid</b> <b>Brn - Fines</b> <b>Turbid</b> <b>16:23 - Casing w.l. recover .2' in 13 min.</b> <b>- coming back very slow - won't be able to check in 4 hrs</b>			
Analyses Requested (see COC) QC Samples: <b>GC/MS</b> Additional Analyses:		Full Suite Rinse Blank Partial Suite (explain) Field Blank Trip Blank		Initial Readings: <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip TOC <b>1.6</b> BZ <b>1.6</b> Bkgnd <b>1.6</b> Sample Readings: TOC BZ Bkgnd Protective Level: B C <b>(D)</b> - <b>Mod</b>			
Additional Comments: <b>Well Markings unclear</b> <b>Ice on well cap.</b>		SERIAL NO. <b>PA920436</b> HSO Signature: Condition of Well, Remarks: <b>Intact - Flush Mount</b> Sampler's Signature: <b>Michael J. Bowen</b>		SERIAL NO. <b>PA920436</b> HSO Signature: Condition of Well, Remarks: <b>Intact - Flush Mount</b> Sampler's Signature: <b>Michael J. Bowen</b>			



## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <b>E1002 MW003</b>	Purge Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____	Analytical Equipment <input type="checkbox"/> pH meter <input type="checkbox"/> Beckman pH 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Conductivity meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u> Temperature meter: <input type="checkbox"/> Beckman pH 21 <input type="checkbox"/> Beckman pH 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>9304</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>90236</u>	Sampler's Initials <b>MKW/MES</b>	Time <b>10:10</b>	Date <b>2-7-94</b>
Casing Diameter <b>4 in.</b>			Motor Calibration pH <b>7</b> = <b>7.03</b> at <b>18</b> °C <b>0800</b> pH <b>4</b> = <b>4.00</b> at <b>18</b> °C <b>0810</b> Conductance Standard: <b>1413</b> $\mu\text{mhos/cm}$ at <b>25</b> °C Measured Value: <b>1146</b> $\mu\text{mhos/cm}$ at <b>25</b> °C <b>0812</b>		
Casing Stickup <b>-2.5 ft.</b>			Dissolved Oxygen Calibrated to <b>N/A</b> mg/l at <b>N/A</b> °C <b>N/A</b>		
Total Well Depth (from TOC) <b>22.12 ft.</b>			Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point <b>N/A</b> pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b>		
Static Water Level (from TOC) <b>18.17 ft.</b>	Sample Equipment: <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____		#Clicks		
Water Thickness <b>3.95 ft.</b>			Color <b>N/A</b> <b>N/A</b> <b>N/A</b> <b>N/A</b>		
Casing Volume <b>2.6 cu. ft.</b> <u>4.14 Annular Vol gal.</u>			Sample Depth (ft.) <b>20.5</b>		
Screened Interval (from GS) <b>19.5 - 22 ft.</b>					
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>55 gal Drum -</b>					

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °F	Pressure	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description	
10:38	Initial	0	18.17	51.0°F	1388	6.76	N/A	B	N/A	LT Brn cloudy Turbid H <sub>2</sub> O Fines
10:41	1/4	1	19.00	52.5°F	1302	6.79	N/A	B	N/A	LT Brn Turbid H <sub>2</sub> O Fines
10:44	1/2	2	20.00	50.4°F	1393	6.78	N/A	B	N/A	LT Brn Turbid H <sub>2</sub> O
10:48	3/4	3	21.01	51.9°F	1366	6.86	N/A	B	N/A	LT Brn cloudy Turbid H <sub>2</sub> O Fines
10:51	1	4	21.51	50.2°F	1377	6.84	N/A	B	N/A	LT Brn Turbid H <sub>2</sub> O Fines
Well dewatered after ~1 C.V. Annular volume Recharge rate $K = \frac{2}{13} \text{ minute}^0$										
Awaiting sufficient recharge to sample -										
13:28	Completed Sampling Full suite - Dup - MS - Rinse Clark - Trip Blank -									
13:32	Final Parameter	18.95	48.5°F	1395	7.05	N/A	B	N/A	cloudy LT Brn H <sub>2</sub> O clearing -	

Analyses Requested (see COC)

COC Samples:

GOMS

Additional Analyses:

Full Suite

Rinse blank

Partial Suite (explain)

Field blank

Dup

Trip blank

Initial Readings:

☐ HNu  
☐ OVA  
☒ Microtip

 TOC 0.0  
 BZ 0.0  
 Bkgnd 0.0

Sample Readings:

 TOC 0.0  
 BZ 0.0  
 Bkgnd 0.0

Protective Level:

B C D

Additional Comments:

Well was dewatered on 2/5/94 - slow recharge rate - made it impossible to purge again within 4 hrs - & sample - well was not sampled or purged on 1/2/6/94 - per Mike - Reust - we are to dewater on 2/7/94 and sample well after sufficient recharge - Also - ice formed around well cap & lock - Had to chip out ice

SERIAL NO. NA900127HSO Signature: Mark WestcottCondition of Well: RemainsIntact - Flush mount -? grout around - well cover -Sampler's Signature: Mark Westcott

F 1125.1  
Harding Lawson Associates

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# GROUNDWATER SAMPLING FIELD DATA SHEET

Well ID. No. <b>E3002MW004</b>	<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" <input type="checkbox"/> 4 ft. LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>H40AC</u> SERIAL NO. <u>9304</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>H40AC</u> SERIAL NO. <u>9304</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>NA</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>H40AC</u> SERIAL NO. <u>9304</u> Filtration Equipment: <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>90236</u>	Sampler's Initials <b>MOB</b>	Time <b>15:03</b>	Date <b>2-5-94</b>
Casing Diameter <b>4</b> in.			Meter Calibration pH <u>7.01</u> = <u>7.03</u> at <u>18</u> °C Time <u>7:30</u> pH <u>4.01</u> = <u>4.00</u> at <u>18</u> °C Time <u>7:30</u> Conductance Standard: <u>1413</u> µmhos/cm at 25°C Measured Value: <u>1117</u> µmhos/cm at 25°C Time <u>18:20</u> Dissolved Oxygen Calibrated to <u>NA</u> mg/l at <u>0</u> °C		
Casing Stickup <b>3.125</b> ft.			Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point <u>NA</u> pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u>		
Total Well Depth (from TOC) <b>10.93</b> ft.			#Clicks <u>NA</u> <u>NA</u> <u>NA</u> <u>NA</u>		
Static Water Level (from TOC) <b>4.72</b> ft.			Color <u>NA</u> <u>NA</u> <u>NA</u> <u>NA</u>		
Water Thickness <b>5.94</b> ft.			Sample Depth: (ft.) <u>8.5</u>		
Casing Volume <b>12.73</b> gal.					
Screened Interval (from GS) <b>6-11</b> ft.					
Purge Contained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drum @ well</u> <u>55-gal.</u>					

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
15:16	Int	10	5.94	53.8	617	6.20				clear
15:18	5 1/3	5	9.0	56.5	646	6.40				lt. Brn - some fines
15:20	8 1/3	8	9.05	56.0	644	6.45				Turbid
15:23	10 1/3	10	10.0	57.6	666	6.55	-Dewater			lt. Brn - Fines
15:51	13 1/3	16	9.25	49.9	636	6.46	-Dewater			Turbid
14:55	2	26	8.75	59.7	762	5.60				Brn *Fines + turbid
15:28	2 2/3	29	9.73	59.9	609	5.72				lt. Brn, cloudy

Final Parameter? (Sample)

Analyses Requested (see COC) QC Samples: <u>GC/MS</u> Additional Analyses:	Full Suite Rinse Blank	Partial Suite (explain) Field Blank Trip Blank	Initial Readings: <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip TOC <u>4.5</u> BZ <u>7</u> Bkgnd <u>0.7</u>	Sample Readings: TOC _____ BZ _____ Bkgnd _____ Protective Level: B C <u>①-1A</u>
Additional Comments: <u>Well Markings not clear</u> <u>Dewatered twice - will</u> <u>sample on (2-6-94)</u>			SERIAL NO. <u>PA 920436</u> HSO Signature: _____ Condition of Well, Remarks: <u>Intact - Flush Mount</u>	
			Sampler's Signature: <u>Michael O. Brown</u>	

## GROUNDWATER SAMPLING FIELD DATA SHEET

Well ID. No. <b>E1003MW001</b>	<b>Purge Equipment</b> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor: O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO. _____	<b>Analytical Equipment</b> pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. _____ Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input checked="" type="checkbox"/> Geotech 0.45 micron filter <input checked="" type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. _____	Sampler's Initials <b>MES/WLM II</b>	Time <b>1035</b>	Date <b>2/16/94</b>
Casing Diameter <b>4</b> in.			<b>Meter Calibration</b> pH _____ = _____ at _____ °C Time _____ pH _____ = _____ at _____ °C Time _____ Conductance Standard: _____ µmhos/cm at 25°C Time _____ Measured Value: _____ µmhos/cm at 25°C Time _____ Dissolved Oxygen Calibrated to _____ mg/l at _____ °C Time _____		
Casing Stickup <b>1.55</b> ft.			<b>Alkalinity Titration Results (Acid Concentration: 0.16N 1.6N)</b> Start Point _____ pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b> #Clicks _____ Color _____		
Total Well Depth (from TOC) <b>14.54/14.52</b> ft.			<b>Sample Depth: (ft.)</b> <b>Mid Point of Screen</b>		
Static Water Level (from TOC) <b>5.55</b> ft.	<b>Sample Equipment</b> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor: O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO. _____				
Water Thickness <b>8.99</b> ft.					
Casing Volume <b>13.3</b> gal.					
Screened Interval (from GS) <b>7-12</b> ft.					
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>Drummed</b>					

Time	Number of Casing Volumes	ions moved	Water Level	Temp	EC	Dissolved	Pump Rate	Approx. Pump Depth	Visual Description
1058	0	0	5.55	42.0	1170	7.12			grayish brown cloudy, much sand
1122	7/13.3	7	11.70	43.4	1004	7.07			grayish brown cloudy, much sand
Well dewatered, waiting for 80% recharge									
1428	8/13.3	~8	7.32	52.4	884	6.95			grayish brown slightly cloudy
1442	14/13.3	~14	11.78	48.2	892	6.89			grayish brown slightly cloudy
1459	Final	~15	11.32	46.2	910	6.76			grayish brown slightly cloudy

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples:

GCMS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

3 VOCs

2 TPH

Additional Comments:

bottom of well (well cap) is ~~damaged~~ damaged. An ~~appreciable~~ amount of filter pack sand is at bottom of well.

☐ HNU☐ OVA☐ Microbi

Initial Readings:

TOC 0.0BZ 0.0Bkgnd 0.0

Sample Readings:

TOC \_\_\_\_\_

BZ \_\_\_\_\_

Bkgnd \_\_\_\_\_

Protective Level:

B C D

SERIAL NO. \_\_\_\_\_

HSO Signature: \_\_\_\_\_

Condition of Well, Remarks:

Mod. fed

Sampler's Signature:

Manus &amp; Senel



## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <b>EI 003 MW002</b>	<b>Purge Equipment</b> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input checked="" type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO. _____	<b>Analytical Equipment</b> <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> <b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> <b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. _____ <b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> <b>Filtration Equipment:</b> <input type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter <b>Water Level Meter:</b> <input type="checkbox"/> Solinst SERIAL NO. _____	Sampler's Initials <b>MES/WLM</b>	Time <b>1050</b>	Date <b>2/16/94</b>
Casing Diameter <b>4</b> in.			<b>Meter Calibration</b> pH _____ at _____ °C Time _____ pH _____ at _____ °C Time _____ Conductance Standard: _____ µmhos/cm at 25°C Time _____ Measured Value: _____ µmhos/cm at 25°C Time _____ Dissolved Oxygen Calibrated to _____ mg/l at _____ °C Time _____		
Casing Stickup <b>1.85</b> ft.			<b>Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N)</b> Start Point _____ pH <b>8.3</b> <b>5.1</b> <b>4.8</b> <b>4.5</b> #Clicks _____ Color _____		
Total Well Depth (from TOC) <del>ms 11.52</del> <b>11.52</b> ft.			Sample Depth: (ft.) <u>Mid point of screen</u>		
Static Water Level (from TOC) <b>6.11</b> ft.	<b>Sample Equipment</b> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input checked="" type="checkbox"/> 4 ft. <input type="checkbox"/> ft. SERIAL NO. _____				
Water Thickness <b>5.67</b> ft.					
Casing Volume <b>9.3</b> gal.					
Screened Interval (from GS) <b>3.9-8.9</b> ft.					
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>Drummed</b>					

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1136	0	0	6.11	43.1	655	7.12				grayish brown cloudy
1146	~1	~10	10.98	43.3	638	7.29				grayish brown cloudy
Well de-aerated, waiting for recharge.										
1522	~1.2	11	7.08	45.7	622	7.49				grayish brown, slightly cloudy
1531	~1.9	~17	11.30	44.9	616	7.43				grayish brown slightly cloudy
1548	Final	18	6.41	44.6	604	7.34				grayish brown slightly cloudy

<b>Analyses Requested (see COC)</b> OC Samples: <b>GCMS</b> Additional Analyses: <b>3 VOAs, 2 TPH</b>	<b>Full Suite</b> Rinse Blank <b>Field Blank</b> Trip Blank	<b>Partial Suite (explain)</b> <b>3 VOAs, 2 TPH</b>	<input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip	<b>Initial Readings:</b> TOC <u>0.0</u> BZ <u>0.0</u> Bknd <u>0.0</u>	<b>Sample Readings:</b> TOC _____ BZ _____ Bknd _____
Additional Comments:			SERIAL NO. _____ HSO Signature: _____ Condition of Well, Remarks: _____ Sample's Signature: <u>Marion E. Semel</u>		

F 1125.1  
Harding Lawson AssociatesTask GW SamplingLog Book # 18

## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <u>E1003MN003</u>		Purge Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____		Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>3837</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>3837</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. _____ Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>3837</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. _____		Sampler's Initials <u>MES/WM II</u>		Time <u>0940</u>		Date <u>2/16/94</u>	
Casing Diameter <u>4</u> in.		Casing Stickup <u>-0.32</u> ft.		Total Well Depth (from TOC) <u>11.34</u> ft.		Meter Calibration pH _____ = _____ at _____ °C pH _____ = _____ at _____ °C Conductance Standard: _____ µmhos/cm at 25°C Measured Value: _____ µmhos/cm at 25°C		Dissolved Oxygen Calibrated to _____ mg/l at _____ °C			
Static Water Level (from TOC) <u>7.41</u> ft.		Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input checked="" type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO. _____		Water Thickness <u>3.93</u> ft.		Casing Volume <u>6.7</u> gal.		Screened Interval (from GS) <u>6.5 - 11.5</u> ft.		Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH _____ 8.3 _____ 5.1 _____ 4.8 _____ 4.5 #Clicks _____ Color _____	
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drummed</u>		Sample Depth: (ft.) <u>Mid point of screen</u>									

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1015	Initial	0	7.41	47.0	1282	7.32	-	-	-	V. slightly cloudy, lt. brown
1025	5/6.7	5	10.07	43.5	1264	7.38	-	-	-	Cloudy, greenish brown
Well dewatered, waiting for 80% recharge to dewater again										
1315	4/6.7	6	7.84	53.4	1217	7.05	-	-	-	cloudy, brownish gray
1338	10/6.7	10	9.67	54.2	1190	7.09	-	-	-	cloudy, brownish gray
Well dewatered again, ready to be sampled after recharge										
1357	Final	Final		51.3	1204	7.06	-	-	-	cloudy, brownish gray

Analyses Requested (see COC)				Full Suite		Partial Suite (explain)		Initial Readings: TOC <u>0.4</u> BZ <u>0.0</u> Bknd <u>0.0</u>		Sample Readings: TOC _____ BZ _____ Bknd _____	
QC Samples: GC/MS		Rinse Blank		Field Blank		Trip Blank		<input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip		Protective Level: B C <u>D</u> Mod. Field	
Additional Analyses: <u>3 VOC's</u>		<u>2 TPH</u>		Additional Comments:		SERIAL NO. _____ HSO Signature: _____ Condition of Well, Remarks:		Sampler's Signature: <u>MES/WM II</u>			

**GROUNDWATER SAMPLING FIELD DATA SHEET**

Well ID. No. <u>FI003MW004</u>		<b>Purge Equipment</b> <input type="checkbox"/> Other <input checked="" type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input checked="" type="checkbox"/> 4 ft. SERIAL NO. _____		<b>Analytical Equipment</b> pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. _____ Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydac</u> SERIAL NO. <u>3837</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. _____		Sampler's Initials <u>MES/WAM</u> Time <u>1100</u> Date <u>2/16/99</u> <b>Meter Calibration</b> pH _____ at _____ °C Time _____ pH _____ at _____ °C Time _____ Conductance Standard _____ µmhos/cm at 25°C Time _____ Measured Value: _____ µmhos/cm at 25°C Time _____ Dissolved Oxygen Calibrated to _____ mg/l at _____ °C Time _____ Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point _____ pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks _____ Color _____ Sample Depth: (ft.) _____ Mid point of screen _____	
Casing Diameter <u>4</u> in. Casing Stickup <u>1.41</u> ft. Total Well Depth (from TOC) <u>20.88/20.91</u> ft. Static Water Level (from TOC) <u>13.59</u> ft. Water Thickness <u>7.29</u> ft. Casing Volume <u>Boring 11.9</u> gal. Screened Interval (from GS) <u>13.5-18.5</u> ft. Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>Drummed</u>		<b>Sample Equipment</b> <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input type="checkbox"/> 3 ft. <input checked="" type="checkbox"/> 4 ft. SERIAL NO. _____					

Time	Number of Casing Volumes	Casing Removed	Water Level	Temp °F	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1618	0	0	13.59	49.9	1045	7.02				brown, turbid, fines.
1629	1	12	19.23	49.6	1122	6.87				brown, cloudy, fines
Well dewatered, will dewater again after recharge										
1643	~1.1	13	15.62	48.6	1116	6.77				brown, cloudy
1652	2	24	18.32	49.4	1156	6.77				brown, cloudy
Well dewatered, will sample after recharge										
1706	Final	~25	15.74	46.2	1196	6.78				brown, cloudy

<b>Analyses Requested (see COC)</b> GC Samples: <u>GC/MS</u> Additional Analyses: _____		Full Suite <input type="checkbox"/> Rinse Blank <input type="checkbox"/> Partial Suite (explain) <input type="checkbox"/> Field Blank <input type="checkbox"/> Trip Blank <input type="checkbox"/>		Initial Readings: <input type="checkbox"/> HNu TOC <u>0.0</u> <input type="checkbox"/> OVA BZ <u>0.0</u> <input type="checkbox"/> Microtip Bkgnd <u>0.0</u>		Sample Readings: TOC _____ BZ _____ Bkgnd _____ Protective Levels: <u>B C D</u> <u>modified</u>	
Additional Comments: _____				SERIAL NO. _____ HSO Signature: <u>W</u> Condition of Well, Remarks: _____		Sampler's Signature: <u>Marion E. Ewing</u>	

EI Site 4

MSR  
2/5/94

F 1125.1

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G.W. Well Purge + Sample  
GROUNDWATER SAMPLING FIELD DATA SHEETTask GW SamplingLog Book # 14Job # 21574, 01.10.13Page 1 of 1

Well ID. No. <u>EIC04MWC01</u>	<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>111</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input checked="" type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Sampler's Initials <u>ASH</u> Time <u>1046</u> Date <u>2/4/94</u> Meter Calibration pH <u>7.01</u> = <u>7.01</u> at <u>17.5</u> °C Time <u>0815</u> pH <u>4.01</u> = <u>4.01</u> at <u>17.5</u> °C Time <u>0815</u> Conductance Standard: <u>1413</u> µmhos/cm at 25°C Measured Value: <u>1212</u> µmhos/cm at 25°C Time <u>0820</u> Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at _____ °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color Sample Depth: (ft.) <u>19.5'</u>
Casing Diameter <u>4</u> in. Casing Stickup <u>1.85</u> ft. Total Well Depth (from TOC) <u>27.02/27.12</u> ft. Static Water Level (from TOC) <u>14.58</u> ft. Water Thickness <u>12.49</u> ft. Casing Volume <u>20.5</u> gal. Screened Interval (from GS) <u>14.35-24.4</u> ft. Purge Contaminized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination:	Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input checked="" type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color Sample Depth: (ft.) <u>19.5'</u>

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	Disolved O <sub>2</sub> mg/liter	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
2/3/94 1615	Initial	C	14.58	59.3	1223	7.26	0.0	0.0	Bailer	Clear
1632	1	21	25.02	56.4	1211	7.29	0.0	0.0	Bailer	Very Cloudy, turbid.
1650	2	42	23.00	56.6	1215	7.43	0.0	0.0	Bailer	Gray, cloudy, turbid.
1740	3	63	23.18	59.6	1257	7.73	0.0	0.0	Bailer	Gray, cloudy, turbid.
2/4/94 0935	Initial	—	14.55	54.4	997	6.74	0.0	0.0	Bailer	Brown, cloudy, turbid.
0955	4	84	22.43	53.9	990	6.82	0.1	0.0	Bailer	Brown, cloudy, turbid.
1025	5	105	24.38	53.4	976	6.90	0.0	0.0	Bailer	Gray, cloudy, turbid.
Well Sampled at 1046 on 2/4/94.										

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples:

GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

Additional Comments:

Well Sampled at 1046 on 2/4/94.

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC 2.1  
 BZ 2.1  
 Bkgnd 2.1

Sample Readings:

 TOC \_\_\_\_\_  
 BZ \_\_\_\_\_  
 Bkgnd \_\_\_\_\_
Protective Level:  
B C ModifiedSERIAL NO. NA930114HSO Signature: Zain A. Hodge

Condition of Well, Remarks:

Well in good condition

Sampler's Signature: Zain A. Hodge

## G.W. Sampling

EI Site 4

MSR  
2/9/94

F 1125.1

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Task G.W. SamplingLog Book # 14

## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <u>EI004MW002</u>	<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydric</u> SERIAL NO. <u>9107E</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input checked="" type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Sampler's Initials <u>DSH</u> Time Date Meter Calibration pH <u>7.01</u> = <u>7.03</u> at <u>18</u> °C <u>0830</u> pH <u>4.01</u> = <u>4.00</u> at <u>18</u> °C <u>0830</u> Conductance Standard: <u>1413</u> <u>µS/cm</u> at 25°C Measured Value: <u>1225</u> <u>µS/cm</u> at 25°C <u>0834</u> Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at <u>0</u> °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color Sample Depth: (ft.) <u>18.5</u>
Casing Diameter <u>4</u> in.	Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Static Water Level (from TOC) <u>16.48</u> ft. Water Thickness <u>7.21</u> ft. Casing Volume <u>12.75</u> gal. Screened Interval (from GS) <u>15.8 - 20.9</u> ft.	Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>55gal Drums</u>
Casing Stickup <u>1.82</u> ft.			
Total Well Depth (from TOC) <u>23.69</u> ft.			
Static Water Level (from TOC) <u>16.48</u> ft.			
Water Thickness <u>7.21</u> ft.			

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °F	E.C. µmhos/cm	pH	Dissolved Oxygen mg/l	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
2/5/94 1615	Initial	—	16.48	63.3	829	9.64	0.0	0.0	Bailer	Cloudy, turbid.
1635	1	13	19.16	56.9	1013	6.02	0.0	0.0	Bailer	Brown, cloudy, turbid
1712	2	26	21.29	40.9	808	6.56	0.0	0.0	Bailer	Brown, cloudy, turbid
1740	3	39	20.09	42.3	818	6.79	0.0	0.0	Bailer	Brown, cloudy, turbid
Stopped for the night. PSA										
2/6/94 0920	4	52	20.60	53.1	1103	6.33	0.0	0.0	Bailer	Brown, Cloudy, Turbid
1000	5	65	20.09	51.3	1080	6.49	0.0	0.0	Bailer	Brown, Cloudy, Turbid
1150	After Sampling	65	20.01	51.2	1041	6.68	0.0	0.0	Bailer	Brown, Cloudy

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples: GCMS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

Initial Readings:

☐ HNu  
☐ OVA  
☒ Microtip

 TOC 4.9  
 BZ 2.9  
 Bknd 2.9

Sample Readings:

 TOC \_\_\_\_\_  
 BZ \_\_\_\_\_  
 Bknd \_\_\_\_\_
Protective Level:  
B C O

Additional Comments:

Sampled EI004MW002 at  
 1000 to 1108 hrs. Left  
 site at 1210 hrs.

SERIAL NO. NH130114HSO Signature: Zain A. Hossain

Condition of Well, Remarks:

Sampler's Signature: Zain A. Hossain 2/6/94



## Well Sampling

EI Site 4

m/sk  
2/18/94  
nr

F 1125.1

Harding Lawson Associates

## Well Purge + Sample

Task 6-W SamplingLog Book # 14

## GROUNDWATER SAMPLING FIELD DATA SHEET

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Well ID. No. <b>E1004MUC03</b>	<input type="checkbox"/> Other	Analytical Equipment <b>pH Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydarc</u> SERIAL NO. <u>9107E</u>	Sampler's Initials <b>DSit</b>	Time <b>0940</b>	Date <b>2/4/94</b>
Casing Diameter <b>4</b> in.	<input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in.	<b>Conductivity Meter:</b> <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydarc</u> SERIAL NO. <u>9107E</u>	Meter Calibration pH <u>7.01</u> = <u>7.03</u> at <u>18</u> °C Time <u>0750</u> pH <u>4.01</u> = <u>4.00</u> at <u>18</u> °C Time <u>0750</u> Conductance Standard: <u>14</u> µmhos/cm at 25°C Measured Value: <u>1225</u> µS at <u>18</u> °C Time <u>0745</u>		
Casing Stickup <b>1.78</b> ft.	<input checked="" type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft.	<b>Dissolved Oxygen Meter:</b> <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u>	Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at <u>   </u> °C		
Total Well Depth (from TOC) <b>27.06</b> ft.	<input type="checkbox"/> Other	<b>Temperature Meter:</b> <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydarc</u> SERIAL NO. <u>9107E</u>	Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u>		
Static Water Level (from TOC) <b>12.65</b> ft.	<input type="checkbox"/> Other	<b>Filtration Equipment:</b> <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input checked="" type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter	#Clicks		
Water Thickness <b>14.41</b> ft.	<input checked="" type="checkbox"/> Stainless Bailor: O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input checked="" type="checkbox"/> 3.75" LENGTH <input checked="" type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft.	<b>Water Level Meter:</b> <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Color		
Casing Volume <b>21</b> gal.	SERIAL NO. <u>   </u>		Sample Depth: (ft.) <b>19.5'</b>		
Screened Interval (from GS) <b>14.4 - 24.4</b> ft.					
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <b>55 gal. Drum</b>					

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °C	E.C. µmhos/cm	pH	PSD Dissolved Solids (mg/l) (Above 8.8g)	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
2/4/94 1521	Initial Parameters	0	12.65	61.2	862	7.39	0.0	0.0	Bailer	Cloudy, turbid
1533	1	20	24.78	53.1	824	7.50	0.0	0.0	Bailer	Brown, cloudy, turbid.
1610	2	42	18.23	51.2	841	7.48	0.0	0.0	Bailer	Brown, cloudy, turbid
1645	3	63	24.21	49.7	811	7.51	0.0	0.0	Bailer	Brownish gray, cloudy, turbid
1719	4	84	25.37	49.9	820	7.55	0.0	0.0	Bailer	Brownish gray, cloudy, turbid.
1733	5	106	26.44	49.4	826	7.50	0.0	0.0	Bailer	Brown, cloudy, turbid.
2/5/94 0940	Sample Parameters	—	13.87	55.2	839	6.89	0.4	0.0	Bailer	Brown, cloudy, turbid.
Well sampled at 0940 on 2/5/94										

Analyses Requested (see COC)

Full Suite

Partial Suite (explain)

QC Samples:

GC/MS

Rinse Blank

Field Blank

Trip Blank

Additional Analyses:

Additional Comments:

Well sampled at 0940 on 2/5/94

☐ HNu  
☐ OVA  
☒ Microtip

Initial Readings:

 TOC 0.0  
 BZ 0.0  
 Bknd 0.0

Sample Readings:

 TOC      
 BZ      
 Bknd    

Protective Level:

B C ☒ ModifiedSERIAL NO. NA930114HSO Signature: Zerin J. Hely

Condition of Well, Remarks:

Well in good condition

Sampler's Signature: Zerin J. Hely

# GROUNDWATER SAMPLING FIELD DATA SHEET

GW Sampling

EI Site 4

MSR  
2/7/94

Task GW Sampling

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Well ID. No. <u>EIC04MMW004</u>	<input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Analytical Equipment pH Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9107E</u> Conductivity Meter: <input type="checkbox"/> YSI Model 33 <input type="checkbox"/> Orion 122 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9107E</u> Dissolved Oxygen Meter: <input type="checkbox"/> YSI Model 50B SERIAL NO. <u>N/A</u> Temperature Meter: <input type="checkbox"/> Beckman phi 21 <input type="checkbox"/> Beckman phi 10 <input type="checkbox"/> Orion SA250 <input checked="" type="checkbox"/> Other <u>Hydax</u> SERIAL NO. <u>9107E</u> Filtration Equipment: <input checked="" type="checkbox"/> Geotech Peristaltic Pump <input checked="" type="checkbox"/> Geotech 0.45 micron filter <input type="checkbox"/> Dispos. 0.45 micron filter Water Level Meter: <input checked="" type="checkbox"/> Solinst SERIAL NO. <u>13041</u>	Sampler's Initials <u>DSH</u> Time <u>1322</u> Date <u>2/5/94</u> Meter Calibration pH <u>7.01</u> = <u>7.03</u> at <u>18</u> °C <u>0.830</u> pH <u>4.01</u> = <u>4.00</u> at <u>18</u> °C <u>0.831</u> Conductance Standard: <u>1413</u> µmhos/cm at 25°C Measured Value: <u>1225</u> µmhos/cm at 25°C <u>0.834</u> Dissolved Oxygen Calibrated to <u>N/A</u> mg/l at <u>0</u> °C Alkalinity Titration Results (Acid Concentration: 0.16N, 1.6N) Start Point pH <u>8.3</u> <u>5.1</u> <u>4.8</u> <u>4.5</u> #Clicks Color Sample Depth: (ft.) <u>17.5</u>
Casing Diameter <u>4</u> in.	Sample Equipment <input type="checkbox"/> Other <input type="checkbox"/> 1.40" Bennett Pump (Teflon Tubing) <input type="checkbox"/> 1.80" Bennett Pump (Teflon Tubing) <input type="checkbox"/> Meyers Pump (PVC Tubing) <input type="checkbox"/> Grundfos Pump (Neoprene Tubing) <input type="checkbox"/> 2 in. <input type="checkbox"/> 3 in. <input checked="" type="checkbox"/> Stainless Bailer O.D. <input type="checkbox"/> 1.65" <input type="checkbox"/> 1.85" <input type="checkbox"/> 3.75" LENGTH <input type="checkbox"/> 2 ft. <input checked="" type="checkbox"/> 3 ft. <input type="checkbox"/> 4 ft. SERIAL NO.	Casing Stickup <u>- 0.4</u> ft.	Total Well Depth (from TOC) <u>20.11/20.18</u> ft.
Static Water Level (from TOC) <u>12.38</u> ft.			
Water Thickness <u>7.73</u> ft.			
Casing Volume <u>13.5</u> gal.			
Screened Interval (from GS) <u>14.8-19.9</u> ft.			
Purge Containerized? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Destination: <u>55 gal. Drum</u>			

Time	Number of Casing Volumes	Gallons Removed	Water Level	Temp °F	E.C. µmhos/cm	pH	Dissolved O <sub>2</sub> mg/l	Pump Rate GPM	Approx. Pump Depth ft.	Visual Description
1140	Initial	-	12.38	58.4	1746	6.59	0.40	0.0	Bailer	Br., Cloudy, Turbid
1158	1	14	15.81	58.4	1705	6.62	0.40	0.0	Bailer	Br., Cloudy, Turbid
1215	2	28	18.01	53.9	1650	6.94	0.40	0.0	Bailer	Br., Cloudy, Turbid
1240	3	42	16.02	50.2	1682	6.88	0.20	0.0	Bailer	Brown, cloudy, turbid
1258	4	56	18.34	49.8	1694	6.84	0.00	0.0	Bailer	Cloudy, turbid
1318	5	70	17.23	49.6	1701	6.69	0.20	0.0	Bailer	Slightly cloudy, turbid
Well sampled at 1322 on 2/5/94										

Analyses Requested (see COC) QC Samples: <u>GC/MS</u> <u>Rinse Blank</u> <u>Field Blank</u> <u>Trip Blank</u> Additional Analyses:	Initial Readings: <input type="checkbox"/> HNu <input type="checkbox"/> OVA <input checked="" type="checkbox"/> Microtip TOC <u>4.6</u> BZ <u>2.3</u> Bknd <u>2.3</u>	Sample Readings: TOC BZ Bknd Protective Level: B C @
Additional Comments: <u>Well sampled at 1322 on 2/5/94</u>	SERIAL NO. <u>NA930114</u> HSO Signature: <u>John A. Hahn</u> Modified Condition of Well, Remarks: <u>The locking cap was broken, so there wasn't a lock on it, will check into.</u> Sampler's Signature: <u>John A. Hahn</u>	

**Appendix G**

**SURFACE SOIL SAMPLE DESCRIPTIONS**



**Table G1: EI Site 4, Directorate of Installation Support (DIS)  
Engineering/Maintenance, Building 26, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description	Soil Association
EI004PCB11	11/19/93	Black clay and sand	Crosby-Brookston
EI004PCB19	11/19/93	Black sandy loam	Crosby-Brookston
EI004PCB26	11/19/93	Soil not described	Crosby-Brookston

**Table G2: EI Site 5, Electrical Shop, Building 4,  
Surface Soil Sample Descriptions**

<b>Site ID</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
E1005PCB10	11/18/93	Soil not described	Crosby-Brookston
E1005PCB13	11/18/93	Soil not described	Crosby-Brookston
E1005SS001	11/29/93	<b>DARK GRAY CLAYEY GRAVEL/SILTY GRAVEL (GC-GM) 10 YR 4/1</b> angular gravel, approximately 1-inch diameter, dark staining, fill	Crosby-Brookston
E1005SS002	11/29/93	<b>LIGHT GRAY CLAYEY GRAVEL/SILTY GRAVEL (GC-GM) 2.5 Y 7/1</b> angular gravel, approximately 1-inch diameter, some dark staining, little fine- to medium-grained sand ( $\approx 10$ percent), fill	Crosby-Brookston
E1005SS003	11/29/93	<b>BLACK CLAYEY GRAVEL/SILTY GRAVEL (GC-GM) 2.5 Y 2.5/1</b> angular gravel, approximately 1-inch diameter, dark staining at surface, little fine- to medium-grained sand ( $\approx 10$ percent)	Crosby-Brookston
E1005SS04	11/29/93	<b>LIGHT GRAY CLAYEY GRAVEL/SILTY GRAVEL (GC-GM) 2.5 YR 7/1</b> angular gravel, approximately 1-inch diameter, dark staining at surface, little fine-to coarse-grained sand ( $\approx 10$ percent), fill	Crosby-Brookston
E1005SS005	11/29/93	<b>GRAY CLAYEY GRAVEL/SILTY GRAVEL (GC-GM), 2.5 Y 6/1</b> angular gravel, approximately 1-inch diameter, organics (roots) throughout ( $\approx 5$ percent), fill	Crosby-Brookston

**Table G3: EI Site 6, Former Coal Storage Yard, Building 2,  
Surface Soil Sample Descriptions**

Site ID	Sample Date	Soil Description and Classification	Soil Association
E1006SS001	11/29/93	<b>BROWN FAT CLAY (CH) 10 YR 4/3</b> moist, soft, high plasticity, low toughness, organics (roots) throughout, trace fine-grained sand ( $\approx 5$ percent)	Crosby-Brookston
E1006SS002	11/29/93	<b>DARK GRAY-BROWN FAT CLAY (CH) 10 YR 4/2</b> moist, soft, high plasticity, low toughness, organics (roots) throughout, trace fine- to coarse-grained sand and gravel ( $\approx 5$ percent)	Crosby-Brookston
E1006SS003	11/29/93	<b>DARK YELLOW-BROWN SANDY CLAY (CL) 10 YR 3/4</b> moist, soft, high plasticity, low toughness, organics (roots) throughout ( $\approx 15$ percent), fine- to coarse-grained sand ( $\approx 25$ percent)	Crosby-Brookston
E1006SS004	11/29/93	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> slightly moist, soft, plastic, low toughness, organics (roots) throughout ( $\approx 10$ percent), fine- to coarse-grained sand ( $\approx 20$ percent)	Crosby-Brookston
E1006SS005	11/29/93	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> moist, soft, plastic, low toughness, fine- to coarse-grained sand ( $\approx 20$ percent)	Crosby-Brookston
E1006SS006	11/29/93	<b>GRAY CLAYEY GRAVEL/SILTY GRAVEL (GC-GM) 5 Y 6/1</b> moist, angular gravel, approximately 1-inch diameter, some fine- to coarse-grained sand ( $\approx 15$ percent)	Crosby-Brookston
E1006SS007	11/30/93	<b>VERY DARK GRAY-BROWN FAT CLAY (CH) 10 YR 3/2</b> moist to wet, soft, high plasticity, low toughness, organics (roots) throughout ( $\approx 10$ percent), some fine- to coarse-grained sand ( $\approx 10$ percent)	Crosby-Brookston

**Table G3 (continued)**

<b>Site ID</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
EI006SS008	11/30/93	<b>VERY DARK GRAY-BROWN FAT CLAY (CH) 10 YR 3/2</b> moist, soft, high plasticity, low toughness, organics (roots) throughout	Crosby-Brookston
EI006SS009	11/30/93	<b>BLACK FAT CLAY (CH) 2.5 Y 2.5/1</b> wet, soft, high plasticity, low toughness, organics (roots) throughout	Crosby-Brookston
EI006SS010	11/30/93	<b>BLACK FAT CLAY (CH) 2.5 Y 2.5/1</b> wet, plasticity, low toughness, organics (roots) throughout	Crosby-Brookston

**Table G4: EI Site SM19, Pesticide Mixing and Storage Areas, Building 514,  
Surface Soil Sample Descriptions**

<b>Site Identification</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
SM019SS001	01/10/94	<b>BROWN SANDY CLAY (CL) 7.5 YR 4/2</b> moist, lean, fine- to medium-grained sand (≈35 percent), fine subangular gravel (≈5 percent)	Miami-Crosby
SM019SS002	01/10/94	<b>BROWN SANDY CLAY (CL) 10 YR 4/3</b> moist, lean, fine-grained sand (≈30 percent), medium-grained sand (≈10 percent), coarse-grained sand (≈50 percent), fine subangular gravel (≈5 percent)	Miami-Crosby
SM019SS003	01/10/94	<b>DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 4/2</b> moist, lean, fine- to medium-grained sand (≈30 percent), fine subrounded gravel (≈5 percent)	Miami-Crosby
SM019SS004	01/10/94	<b>DARK SANDY CLAY (CL) 10 YR 4/3</b> moist, lean, fine- to medium-grained (≈40 percent), fine subangular gravel (≈5 percent)	Miami-Crosby
SM019SS005	01/10/94	<b>DARK GRAY-BROWN CLAYEY GRAVEL (GC)</b> moist, fine to medium subangular white gravel (≈60 percent)	Miami-Crosby
SM019SS006	01/10/94	<b>BROWN TO WHITE CLAYEY GRAVEL (GC) 10 YR 4/3</b> moist, fine to coarse gravel (≈70 percent), crushed subangular limestone	Miami-Crosby
SM019SS007	01/10/94	<b>BROWN GRAVELLY CLAY TO CLAYEY GRAVEL (GC-CL)</b> moist, lean, fine to medium subangular gravel (≈45 to 55 percent)	Miami-Crosby
SM019SS008	01/10/94	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> moist, lean, fine- to medium-grained sand (≈30 percent)	Miami-Crosby
SM019SS009	01/10/94	<b>DARK BROWN SANDY CLAY (CL)</b> moist, lean, fine- to medium-grained sand (≈30 percent), fine gravel (≈5 percent)	Miami-Crosby

**Table G4 (continued)**

<b>Site Identification</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
SM019SS010	01/10/94	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> moist, lean, fine- to medium-grained sand (≈30 percent)	Miami-Crosby
SM019SS011	01/10/94	<b>DARK BROWN SANDY CLAY WITH GRAVEL (CL) 10 YR 3/3</b> moist, lean, fine- to medium-grained sand (≈30 percent), fine subangular gravel (≈15 percent)	Miami-Crosby
SM019SS012	01/10/94	<b>VERY DARK GRAY-BROWN GRAVELLY CLAY (CL) 10 YR 3/2</b> moist, lean, fine rounded gravel (≈30 percent), fine-grained sand (≈10 percent)	Miami-Crosby

**Table G5: EI Site SM20, Pesticide Mixing and Storage Areas, DIS Entomology, Building 605, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM020SS001	12/21/93	<b>BLACK SAND (SP) 5 Y 2.5/1</b> moist, loose, some organics (leaves), fine- to medium-grained sand	Miami-Crosby
SM020SS002	12/21/93	<b>VERY DARK GRAY LEAN CLAY (CL) 2.5 Y 3/1</b> moist, soft, trace organics (roots), low plasticity	Miami-Crosby
SM020SS003	12/21/93	<b>VERY DARK GRAY FAT CLAY (CH) 2.5 Y 3/1</b> moist, soft, trace organics (roots), medium plasticity	Miami-Crosby
SM020SS004	12/21/93	<b>VERY DARK GRAY FAT CLAY (CH) 2.5 Y 3/1</b> moist, soft, trace organics (roots), medium plasticity	Miami-Crosby
SM020SS005	12/21/93	<b>LIGHT OLIVE-GRAY FAT CLAY (CH)</b> moist, soft, trace organics (roots), medium plasticity	Miami-Crosby
SM020SS006	12/21/93	<b>BLACK FAT CLAY (CH) 5 Y 2.5/1</b> moist, soft, high plasticity	Miami-Crosby
SM020SS007	12/21/93	<b>VERY DARK GRAY GRAVEL (GP) 2.5 Y 3/1</b> moist, dense	Miami-Crosby
SM020SS008	12/21/93	<b>VERY DARK GRAY-BROWN LEAN CLAY (CL) 2.5 Y 3/1</b> moist, soft, low plasticity, trace organics (roots)	Miami-Crosby
SM020SS009	12/21/93	<b>LIGHT OLIVE BROWN FAT CLAY (CH) 2.5 Y 5/3</b> moist, soft, trace organics (roots)	Miami-Crosby
SM020SS010	12/21/93	<b>VERY DARK GRAY-BROWN LEAN CLAY (CL) 2.5 Y 3/2</b> moist, soft, low plasticity, trace organics (roots)	Miami-Crosby
SM020SS011	12/21/93	<b>VERY DARK GRAY-BROWN LEAN CLAY (CL)</b> moist, soft, low plasticity, trace organics (roots)	Miami-Crosby

**Table G5 (continued)**

<b>Site Identification</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
SM020SS012	12/21/93	<b>VERY DARK GRAY-BROWN FAT CLAY (CH)</b> moist, soft, medium plasticity, trace organics (roots)	Miami-Crosby



**Table G6: EI Site SM21, Pesticide Mixing and Storage Areas,  
Golf Course Pesticide Mixing Area, Building 674, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM021SS001	01/05/94	<b>BLACK SILTY SAND WITH GRAVEL (SM) 10 YR 2/1</b> moist, fine- to medium-grained sand (≈55 percent), fine gravel (≈15 percent), silt (≈30 percent)	Genesee-Sloan
SM021SS002	01/06/94	<b>SILTY LIMESTONE GRAVEL</b>	Genesee-Sloan
SM021SS003	01/05/94	<b>BLACK SILTY SAND WITH GRAVEL (SM) 10 YR 2/1</b> moist, fine- to medium-grained sand (≈55 percent), fine to medium gravel (≈10 percent fine, ≈5 percent medium), subangular to subrounded gravel, silt (≈30 percent)	Genesee-Sloan
SM021SS004	01/06/94	<b>SILTY LIMESTONE GRAVEL</b>	Genesee-Sloan
SM021SS005	01/05/94	<b>BROWN SANDY CLAY (CL) 7.5 YR 4/3</b> moist, lean, fine-grained sand (≈30 percent), fine subangular gravel (≈10 percent)	Genesee-Sloan
SM021SS006	01/05/94	<b>DARK BROWN GRAVELLY SAND WITH SILT (SM) 10 YR 3/3</b> moist, fine- to coarse-grained sand (≈50 percent), fine to medium limestone gravel (≈25 percent), subangular gravel, silt (≈25 percent)	Genesee-Sloan
SM021SS007	01/05/94	<b>BLACK CLAYEY SAND (SC) 10 YR 2/1</b> very moist, fine- to coarse-grained sand (≈50 percent), fines (≈40 percent), septic odor	Genesee-Sloan
SM021SS008	01/05/94	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> moist, fine- to medium-grained sand (≈30 percent), fines (≈65 percent), fine subrounded gravel (≈5 percent), rooted	Genesee-Sloan
SM021SS009	01/05/94	<b>VERY DARK GRAY-BROWN SILTY CLAY (CL) 10 YR 3/2</b> moist, fine-grained sand (≈10 percent), lean, rooted	Genesee-Sloan

**Table G6 (continued)**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM021SS010	01/05/94	<b>VERY DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/2</b> moist, fine-grained sand ( $\approx 15$ percent), lean, rooted	Genesee-Sloan
SM021SS011	01/05/94	<b>BLACK SANDY CLAY (CL) 2.5 Y 2.5/1</b> moist, fine- to medium-grained sand ( $\approx 45$ percent), fines ( $\approx 55$ percent), lean	Genesee-Sloan
SM021SS012	01/05/94	<b>BLACK SANDY CLAY (CL) 2.5 Y 2.5/1</b> moist, fine- to medium-grained sand ( $\approx 25$ percent), fines ( $\approx 75$ percent), lean	Genesee-Sloan

**Table G7: EI Site SM22, Firing Range, Foreman Rifle Range,  
Near Buildings 811 and 812, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM022SS001	01/06/94	<b>BROWN SANDY CLAY (CL) 10 YR 4/3</b> moist, fine-grained sand ( $\approx 35$ percent)*	Genesee-Sloan
SM022SS002	01/06/94	<b>BROWN SANDY CLAY (CL) 10 YR 4/3</b> moist, fine-grained sand ( $\approx 40$ percent)*	Genesee-Sloan
SM022SS003	01/06/94	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> moist, fine- to medium-grained sand ( $\approx 35$ percent)*	Genesee-Sloan
SM022SS004	01/06/94	<b>VERY DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 3/2</b> moist, fine- to coarse-grained sand ( $\approx 35$ percent), fine subrounded gravel ( $\approx 10$ percent)*	Genesee-Sloan
SM022SS005	01/06/94	<b>DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 4/2</b> moist, fine- to coarse-grained sand ( $\approx 35$ percent), fine subrounded gravel ( $\approx 5$ percent)*	Genesee-Sloan
SM022SS006	01/06/94	<b>YELLOW-BROWN SANDY CLAY (CL) 10 YR 6/6</b> very moist, fine- to medium-grained sand ( $\approx 45$ percent), lean	Genesee-Sloan
SM022SS007	01/06/94	<b>BROWN SANDY CLAY (CL) 10 YR 4/3</b> moist, lean, fine- to medium-grained sand ( $\approx 35$ percent)	Genesee-Sloan
SM022SS008	01/06/94	<b>DARK GRAY-BROWN SANDY CLAY (CL) 10 YR 4/2</b> moist, lean, fine- to coarse-grained sand ( $\approx 40$ percent), fine subrounded gravel ( $\approx 5$ percent)	Genesee-Sloan
SM022SS009	01/06/94	<b>VERY DARK GRAY-BROWN SANDY CLAY WITH SILT (CL) 10 YR 3/2</b> moist, lean, fine- to coarse-grained sand ( $\approx 35$ percent)	Genesee-Sloan

**Table G7 (continued)**

<b>Site Identification</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
SM022SS010	01/06/94	<b>BROWN SANDY CLAY (CL) 10 YR 4/3</b> moist, lean, fine- to coarse-grained sand ( $\approx$ 35 percent), fine subrounded gravel ( $\approx$ 5 percent)	Genesee-Sloan
SM022SS011	01/06/94	<b>DARK BROWN CLAYEY SAND (SC)</b> moist, fine- to coarse-grained sand ( $\approx$ 55 percent)	Genesee-Sloan

\* Soil description and classification from corresponding log of boring

**Table G8: EI Site SM23, Firing Range, State Police Pistol Range, Near Building 815, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM023SS001	12/08/93	<b>VERY DARK GRAY SANDY CLAY WITH SAND (CL) 2.5 Y 3/1</b> moist, fine- to coarse-grained sand ( $\approx 10$ percent), fine subangular gravel ( $\approx 5$ percent), rootlets*	Genesee-Sloan
SM023SS002	12/08/93	<b>DARK YELLOW-BROWN SILTY SAND (SM) 10 YR 4/4</b> wet, silt ( $\approx 40$ percent), fine-grained sand ( $\approx 40$ percent), medium-grained sand ( $\approx 15$ percent), coarse-grained sand ( $< 5$ percent), fine subangular gravel ( $< 5$ percent), gravel diameter $< 3/4$ -inch, bullet fragments	Genesee-Sloan
SM023SS003	12/08/93	<b>BROWN SAND WITH SILT (SP-SM) 10 YR 4/3</b> very moist to wet, fine-grained sand ( $\approx 35$ percent), medium-grained sand ( $\approx 35$ percent), coarse-grained sand ( $\approx 15$ percent), subangular to subrounded, fine subangular to subrounded gravel ( $\approx 5$ percent), fines ( $\approx 10$ percent)*	Genesee-Sloan
SM023SS004	12/08/93	<b>BROWN CLAYEY SAND (SC) 10 YR 4/3</b> moist, fine-grained sand ( $\approx 35$ percent), medium-grained sand ( $\approx 25$ percent), coarse- grained sand ( $\approx 5$ percent), fine subangular gravel ( $\approx 5$ percent), bullet fragments*	Genesee-Sloan
SM023SS005	12/08/93	<b>VERY DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/2</b> moist, fine-grained sand ( $\approx 15$ percent), medium-grained sand ( $< 5$ percent)*	Genesee-Sloan
SM023SS006	12/08/93	<b>VERY DARK GRAY-BROWN SILTY SAND (SM) 10 YR 3/2</b> moist, fine-grained sand ( $\approx 40$ percent), medium-grained sand ( $\approx 20$ percent), coarse- grained sand ( $< 5$ percent), silt ( $\approx 35$ percent), fine subangular gravel ( $\approx 5$ percent), gravel diameter $\leq 1/2$ -inch, bullet fragments, rootlets	Genesee-Sloan

**Table G8 (continued)**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM023SS007	12/08/93	<b>VERY DARK GRAY-BROWN SILTY SAND (SM) 10 YR 3/2</b> very moist, fine-grained sand ( $\approx 35$ percent), medium-grained sand ( $\approx 25$ percent), coarse-grained sand ( $< 5$ percent), fine subangular to subrounded gravel ( $\approx 5$ percent), gravel diameter $\leq 1/2$ -inch, bullet fragments, rootlets	Genesee-Sloan
SM023SS008	12/08/93	<b>BROWN SANDY CLAY (CL) 10 YR 4/3</b> very moist, fine-grained sand ( $\approx 35$ percent), medium-grained sand ( $\approx 10$ percent), bullet fragments	Genesee-Sloan
SM023SS009	12/08/93	<b>VERY DARK GRAY-BROWN CLAYEY SILT WITH SAND (ML) 10 YR 3/2</b> very moist, fine-grained sand ( $\approx 20$ percent), medium-grained sand ( $\approx 5$ percent), rootlets, bullet fragments	Genesee-Sloan
SM023SS010	12/08/93	<b>VERY DARK GRAY SANDY SILT WITH SAND (ML) 10 YR 3/1</b> very moist, fine-grained sand ( $\approx 25$ percent), rootlets	Genesee-Sloan

\* Soil description and classification from corresponding log of boring

**Table G9: EI Site SM24, Firing Range, Skeet/Rifle Range,  
Near Buildings 819 Through 822, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM024SS001	02/19/94	<b>DARK BROWN SILTY CLAY WITH SAND (CL) 7.5 YR 3/2</b> wet, plastic, fine- to medium-grained sand ( $\approx$ 20 percent), angular to subrounded sand, trace organic (roots, leaves) material, organic odor	Genesee-Sloan
SM024SS002	02/19/94	<b>DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 10 YR 4/2</b> moist, plastic, fine-grained sand ( $\approx$ 15 percent), medium-grained sand ( $\approx$ 5 percent), subrounded sand, organic odor, trace organic (straw) material	Genesee-Sloan
SM024SS003	02/19/94	<b>VERY DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/2</b> moist, low plasticity, fine-grained sand ( $\approx$ 15 percent), trace coarse-grained sand ( $<$ 1 percent), angular to subrounded sand, trace organic (roots, grass) material, organic odor	Genesee-Sloan
SM024SS004	02/19/94	<b>VERY DARK GRAY SILTY CLAY WITH SAND (CL) 10 YR 3/1</b> moist, plastic, fine-grained sand ( $\approx$ 10 percent), medium- to coarse-grained sand ( $\approx$ 10 percent), angular to subrounded sand, fine gravel ( $<$ 5 percent), trace organic (roots, grass, leaves) material	Genesee-Sloan
SM024SS005	02/19/94	<b>DARK BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/3</b> wet, plastic, fine-grained sand ( $\approx$ 10 percent), medium- to coarse-grained sand ( $\approx$ 10 percent), angular to rounded sand, trace organic (roots, lichen, seeds) matter, organic odor, trace lead shot	Genesee-Sloan
SM024SS006	02/19/94	<b>DARK BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/3</b> wet, plastic, fine-grained sand ( $\approx$ 10 percent), medium- to coarse-grained sand ( $\approx$ 10 percent), angular to rounded sand, trace organic (roots) material, organic odor	Genesee-Sloan

**Table G9 (continued)**

<b>Site Identification</b>	<b>Sample Date</b>	<b>Soil Description and Classification</b>	<b>Soil Association</b>
SM024SS007	02/19/94	<b>DARK BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/3</b> wet, plastic, fine-grained sand ( $\approx 10$ percent), medium- to coarse-grained sand ( $\approx 10$ percent), subangular to subrounded sand, trace organic (rootlets) material	Genesee-Sloan
SM024SS008	02/19/94	<b>DARK OLIVE-GRAY SILTY CLAY WITH SAND (CL) 5 Y 3/2</b> wet, plastic, fine-grained sand ( $\approx 10$ percent), medium- to coarse-grained sand ( $\approx 10$ percent), trace fine gravel ( $< 1$ percent), subangular to subrounded gravel and sand, trace organic (rootlets) material	Genesee-Sloan
SM024SS009	02/19/94	<b>VERY DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 2.5 Y 3/2</b> wet, plastic, fine-grained sand ( $\approx 10$ percent), medium- to coarse-grained sand ( $\approx 10$ percent), trace fine gravel ( $< 1$ percent), subangular to subrounded sand and gravel, organic (rootlets, leaves) material ( $\approx 5$ percent), one rifle bullet	Genesee-Sloan
SM024SS010	02/19/94	<b>DARK BROWN SILTY CLAY WITH SAND (CL) 7.5 YR 3/2</b> wet, plastic, fine-grained sand ( $\approx 10$ percent), medium-grained sand ( $\approx 7$ percent), coarse-grained sand ( $\approx 3$ percent), subangular to rounded sand, trace organic (rootlets, leaves) material	Genesee-Sloan
SM024SS011	02/19/94	<b>VERY DARK GRAY-BROWN SILTY CLAY (CL) 10 YR 3/2</b> fine-grained sand ( $\approx 10$ percent), medium- to coarse-grained sand ( $< 5$ percent), trace organic (rootlets, leaves) material ( $< 5$ percent), organic odor	Genesee-Sloan



**Table G9 (continued)**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM024SS012	02/19/94	<b>VERY DARK BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/2</b> wet, plastic, fine- and coarse-grained sand ( $\approx 20$ percent), medium-grained sand ( $< 5$ percent), trace organic (rootlets) material ( $< 1$ percent)	Genesee-Sloan
SM024SS013	02/19/94	<b>VERY DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/2</b> wet, plastic, fine-grained sand ( $\approx 15$ percent), medium-grained sand ( $\approx 5$ percent), coarse-grained sand ( $< 5$ percent), fine gravel ( $< 1$ percent), subangular to subrounded sand and gravel, trace organic (rootlets) material ( $< 1$ percent)	Genesee-Sloan
SM024SS014	02/19/94	<b>VERY DARK GRAY-BROWN SILTY CLAY WITH SAND (CL) 10 YR 3/2</b> wet, plastic, fine-grained sand ( $\approx 15$ percent), medium-grained sand ( $\approx 5$ percent), coarse-grained sand ( $< 5$ percent), fine gravel ( $< 1$ percent), subangular to subrounded sand and gravel, trace organic (roots) material ( $< 1$ percent)	Genesee-Sloan
SM024SS015	02/19/94	<b>VERY DARK GRAY SILTY CLAY (CL)</b> very moist, plastic, fine-grained sand ( $\approx 5$ percent), medium-grained sand ( $\approx 3$ percent), coarse-grained sand ( $\approx 2$ percent), subrounded sand, trace organic (rootlets) material ( $< 1$ percent)	Genesee-Sloan
SM024SS016	02/19/94	<b>VERY DARK GRAY-BROWN SILTY CLAY (CL) 10 YR 3/2</b> wet, plastic, fine-grained sand ( $\approx 5$ percent), trace medium- and coarse-grained sand ( $< 5$ percent), subangular to subrounded sand, trace organic (leaves, rootlets) material ( $< 5$ percent)	Genesee-Sloan
SM024SS017	02/19/94	<b>DARK BROWN SILTY CLAY (CL) 7.5 YR 3/2</b> wet, plastic, fine-grained sand ( $\approx 5$ percent), subrounded sand, trace organic (rootlets) material ( $< 5$ percent), organic odor	Genesee-Sloan

**Table G10: EI Site SM25b, Historic Military Site, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM25BSS001	02/07/94	<b>VERY DARK GRAY SILTY CLAY (CL)</b> <b>10 YR 3/1</b> moist, silt ( $\approx 30$ percent), fine-grained sand ( $\approx 5$ percent), subangular and subrounded sand, medium plasticity, occasional rootlets ( $< 1$ percent)	Miami-Crosby
SM25BSS002	02/07/94	<b>VERY DARK GRAY SILTY CLAY (CL)</b> <b>10 YR 3/1</b> moist, silt ( $\approx 35$ percent), fine-grained sand ( $\approx 5$ percent), subangular and subrounded sand, medium plasticity, rare rootlets ( $< 1$ percent)	Miami-Crosby
SM25BSS003	02/07/94	<b>VERY DARK GRAY SILTY CLAY (CL)</b> <b>10 YR 3/1</b> moist, silt ( $\approx 30$ percent), fine-grained sand ( $\approx 5$ percent), medium- to coarse-grained sand ( $< 1$ percent), medium plasticity, rare rootlets ( $< 1$ percent)	Miami-Crosby
SM25BSS004	02/07/94	<b>VERY DARK GRAY-BROWN SILTY CLAY (CL)</b> <b>10 YR 3/2</b> wet, silt ( $\approx 30$ percent), nonplastic, fine- and coarse-grained sand ( $\approx 5$ percent), subangular and subrounded sand	Miami-Crosby
SM25BSS005	02/07/94	<b>VERY DARK GRAY-BROWN SILTY CLAY (CL)</b> <b>10 YR 3/2</b> moist, silt ( $\approx 30$ percent), fine-grained sand ( $\approx 5$ percent), subangular and subrounded sand, medium plasticity	Miami-Crosby
SM25BSS006	02/07/94	<b>VERY DARK GRAY-BROWN SILTY CLAY (CL)</b> <b>10 YR 3/2</b> moist, silt ( $\approx 30$ percent), medium plasticity, fine- to coarse-grained sand ( $< 5$ percent), subangular and subrounded sand	Miami-Crosby

**Table G11: EI Site SM25h, Historic Military Site, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM25HSS001	02/06/94	<b>DARK GRAY SILTY CLAY (CL) 10 YR 4/1</b> moist, silt ( $\approx 30$ percent), plastic, fine- to medium-grained sand ( $\approx 5$ percent), subangular and subrounded sand, coarse sand-sized slag ( $< 1$ percent), rootlets ( $< 1$ percent)	Miami-Crosby
SM25HSS002	02/06/94	<b>DARK GRAY PEATY CLAY (PT/CL) 10 YR 4/1</b> moist, organic (tree bark) material ( $\approx 40$ percent), nonplastic, fine- to coarse-grained sand ( $\approx 10$ percent), subrounded and subangular sand, medium angular gravel ( $< 1$ percent)	Miami-Crosby
SM25HSS003	02/06/94	<b>DARK GRAY SILTY CLAY (CL) 10 YR 4/1</b> moist, silt ( $\approx 40$ percent), low plasticity, fine- to medium-grained sand ( $\approx 10$ percent), subrounded sand, organic (tree bark, rootlets) material ( $< 5$ percent)	Miami-Crosby
SM25HSS004	02/06/94	<b>DARK GRAY SILTY CLAY (CL) 10 YR 4/1</b> wet, silt ( $\approx 30$ percent), low plasticity, fine- to coarse-grained sand ( $\approx 10$ percent), subrounded sand, fine gravel-sized slag ( $< 5$ percent)	Miami-Crosby
SM25HSS005	02/06/94	<b>DARK GRAY SILTY CLAY (CL) 10 YR 4/1</b> wet, silt ( $\approx 35$ percent), low plasticity, fine- to coarse-grained sand ( $\approx 5$ percent), subangular to subrounded sand, fine angular gravel ( $< 1$ percent), organic (leaves, roots, twigs) material ( $< 5$ percent)	Miami-Crosby
SM25HSS006	02/06/94	<b>DARK GRAY SILTY CLAY (CL) 10 YR 4/1</b> wet, silt ( $\approx 30$ percent), plastic, fine- to coarse-grained sand ( $\approx 5$ percent), subrounded sand, medium angular gravel ( $< 1$ percent), rusted wire fence fragments ( $\approx 1$ percent)	Miami-Crosby

**Table G12: EI Site SM25i, Historic Military Site, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM25ISS001	02/07/94	<b>VERY DARK GRAY CLAYEY GRAVEL WITH SAND (GP-GC)</b> moist, fine rounded gravel, fine- to coarse-grained sand ( $\approx 30$ percent), subangular to subrounded sand, silt ( $\approx 10$ percent), nonplastic clay ( $\approx 10$ percent), organic (rootlets) material ( $\approx 10$ percent)	Miami-Crosby
SM25ISS002	02/07/94	<b>VERY DARK GRAY SILTY CLAY (CL) 7.5 YR 3/1</b> moist, silt ( $\approx 30$ percent), low plasticity, fine- to coarse-grained sand ( $\approx 5$ percent), subrounded sand, organic (rootlets) material ( $\approx 5$ percent)	Miami-Crosby
SM25ISS003	02/07/94	<b>VERY DARK GRAY SAND (SP) 7.5 YR 3/1</b> moist, fine-grained ( $\approx 40$ percent), medium-grained ( $\approx 30$ percent), coarse-grained ( $\approx 10$ percent), subrounded, fine gravel ( $\approx 10$ percent), silt ( $\approx 5$ percent), clay ( $\approx 5$ percent), trace organic (rootlets) material ( $< 1$ percent)	Miami-Crosby
SM25ISS004	02/07/94	<b>VERY DARK GRAY SILTY CLAY (CL) 7.5 YR 3/1</b> moist, silt ( $\approx 25$ percent), medium plasticity, fine-grained sand ( $\approx 5$ percent), medium- to coarse-grained sand ( $< 1$ percent), subrounded sand, trace organic (rootlets) material	Miami-Crosby
SM25ISS005	02/07/94	<b>VERY DARK GRAY SILTY CLAY (CL) 7.5 YR 3/1</b> wet, silt ( $\approx 30$ percent), low plasticity, fine- to medium-grained sand ( $< 5$ percent), subrounded sand, trace rootlets ( $< 1$ percent), organic odor	Miami-Crosby
SM25ISS006	02/07/94	<b>VERY DARK GRAY CLAY (CL) 7.5 YR 3/1</b> very moist, high plasticity, silt ( $\approx 15$ percent), fine-grained sand ( $\approx 5$ percent), well rounded sand, trace rootlets ( $< 1$ percent)	Miami-Crosby

**Table G13: EI Site SM25j, Historic Military Site, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM25JSS001	02/07/95	<b>DARK RED-BROWN SILTY CLAY (CL)</b> <b>5 YR 3/2</b> silt ( $\approx 30$ percent), trace fine-grained sand (< 1 percent), trace organic (rootlets) material (< 1 percent)	Miami-Crosby
SM25JSS002	02/07/95	<b>DARK RED-BROWN SILTY CLAY (CL)</b> <b>5 YR 3/2</b> moist, silt ( $\approx 30$ percent), plastic, fine-grained sand (< 1 percent), coarse-grained sand (< 1 percent), subrounded sand, organic (rootlets) material (< 1 percent)	Miami-Crosby
SM25JSS003	02/07/95	<b>DARK RED-BROWN SILTY CLAY (CL)</b> <b>5 YR 3/2</b> moist, silt ( $\approx 30$ percent), fine- to coarse-grained sand (< 1 percent), subangular sand, plastic, organic (rootlets) material (< 1 percent)	Miami-Crosby
SM25JSS004	02/07/95	<b>DARK RED-BROWN SILTY CLAY (CL)</b> <b>5 YR 3/2</b> moist, silt ( $\approx 30$ percent), plastic, fine- to coarse-grained sand (< 1 percent), subrounded sand, organic (rootlets) material (< 1 percent)	Miami-Crosby
SM25JSS005	02/07/95	<b>DARK RED-BROWN SILTY CLAY (CL)</b> <b>5 YR 2.5/2</b> moist, silt ( $\approx 35$ percent), plastic, fine-grained sand (< 1 percent), subangular to subrounded sand, organic (rootlets) material (< 1 percent)	Miami-Crosby
SM25JSS006	02/07/95	<b>DARK RED-BROWN SILTY CLAY (CL)</b> <b>5 YR 3/2</b> moist, silt ( $\approx 40$ percent), plastic, fine- to coarse-grained sand (< 1 percent), subangular to subrounded sand, organic (rootlets) material (< 1 percent)	Miami-Crosby

**Table G14: EI Site SM25k, Historic Military Site, Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SM25KSS001	02/22/94	<b>VERY DARK GRAY CLAY (CL) 10 YR 3/1</b> moist, soft, silt ( $\approx 5$ percent), fine-grained sand ( $< 5$ percent), angular to subangular sand, plastic, organic (leaves, rootlets) material ( $< 5$ percent)	Genesee-Sloan
SM25KSS002	02/22/94	<b>VERY DARK GRAY-BROWN CLAY WITH SAND (CL) 10 YR 3/2</b> moist, low plasticity, silt ( $\approx 10$ percent), fine- to medium-grained sand ( $\approx 10$ percent), coarse-grained sand ( $\approx 10$ percent), angular to subrounded sand, fine subrounded to rounded gravel ( $\approx 5$ percent)	Genesee-Sloan
SM25KSS003	02/22/94	<b>VERY DARK GRAY-BROWN CLAY WITH SILT (CL) 10 YR 3/2</b> moist, silt ( $\approx 10$ percent), fine- to medium-grained sand ( $< 5$ percent), medium plasticity	Genesee-Sloan
SM25KSS004	02/22/94	<b>VERY DARK GRAY-BROWN GRAVELLY CLAY WITH SAND (CL) 10 YR 3/2</b> moist, fine subrounded to well rounded gravel ( $\approx 35$ percent), fine- to coarse-grained sand ( $\approx 15$ percent), silt ( $\approx 5$ percent), low plasticity, organic (rootlets) material ( $< 5$ percent)	Genesee-Sloan
SM25KSS005	02/22/94	<b>VERY DARK GRAY-BROWN CLAY WITH SILT (CL)</b> moist, silt ( $\approx 15$ percent), fine subrounded to rounded gravel ( $\approx 10$ percent), fine- to medium-grained sand ( $\approx 10$ percent), coarse-grained sand ( $< 5$ percent), subrounded sand, medium plasticity, organic (rootlets) material ( $< 5$ percent)	Genesee-Sloan
SM25KSS006	02/22/94	<b>DARK GRAY CLAY WITH SILT (CL) 10 YR 4/1</b> moist, silt ( $\approx 15$ percent), fine- to medium-grained sand ( $< 5$ percent), subrounded to rounded sand, plastic, organic (rootlets) material ( $< 5$ percent)	Genesee-Sloan

**Table G15: Background Surface Soil Sample Descriptions**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SMBKGSS001	11/23/93	<b>DARK BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS002	11/23/93	<b>DARK BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS003	11/23/93	<b>DARK BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS004	11/23/93	<b>DARK BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS005	11/23/93	<b>BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, trace of fine- to medium-grained sand ( $< 5$ percent), high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS006	11/23/93	<b>BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS007	11/23/93	<b>BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, trace of fine- to medium-grained sand (5 percent), high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Genesee-Sloan
SMBKGSS008	12/20/93	<b>BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Miami-Crosby
SMBKGSS009	11/23/93	<b>BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Miami-Crosby
SMBKGSS010	11/23/93	<b>BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Miami-Crosby
SMBKGSS011	11/23/93	<b>VERY DARK GRAYISH BROWN FAT CLAY (CH) 10 YR 3/3</b> moist, high plasticity, organics (roots) throughout ( $\approx 15$ percent)	Crosby-Brookston

**Table G15 (continued)**

Site Identification	Sample Date	Soil Description and Classification	Soil Association
SMBKGSS012	11/23/93	Soil not described	Crosby-Brookston
SMBKGSS013	11/29/93	<b>DARK GRAY CLAYEY SILT (ML) 2.5 YR 3/1</b> moist, low plasticity, with roots	Crosby-Brookston
SMBKGSS014	11/29/93	<b>BLACK SILTY SAND (SM) [FILL] 7.5 YR 2.5/1</b> moist, fine- to coarse-grained sand, fine to coarse gravel ( $\approx 5$ percent) subangular to subrounded, with roots	Crosby-Brookston
SMBKGSS015	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 2.5 Y 3/2</b> moist, low to medium plasticity, with roots	Crosby-Brookston
SMBKGSS016	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 2.5 Y 3/2</b> moist to wet, low to medium plasticity, with roots	Crosby-Brookston
SMBKGSS017	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 2.5 Y 3/2</b> moist to wet, low to medium plasticity, with roots	Crosby-Brookston
SMBKGSS018	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 10 YR 3/2</b> moist, fine- to medium-grained sand ( $\approx 5$ percent), low to medium plasticity, with roots	Miami-Crosby
SMBKGSS019	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 2.5 Y 3/2</b> moist, fine-grained sand ( $\approx 5$ percent), low to medium plasticity, with roots	Miami-Crosby
SMBKGSS020	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 2.5 Y 3/2</b> moist, fine- to medium-grained sand ( $\approx 5$ percent), low to medium plasticity, with roots	Miami-Crosby
SMBKGSS021	11/29/93	<b>VERY DARK GRAYISH BROWN SILTY CLAY (CL) 2.5 Y 3/2</b> moist, fine- to medium-grained sand ( $\approx 5$ percent), low to medium plasticity, with roots	Miami-Crosby



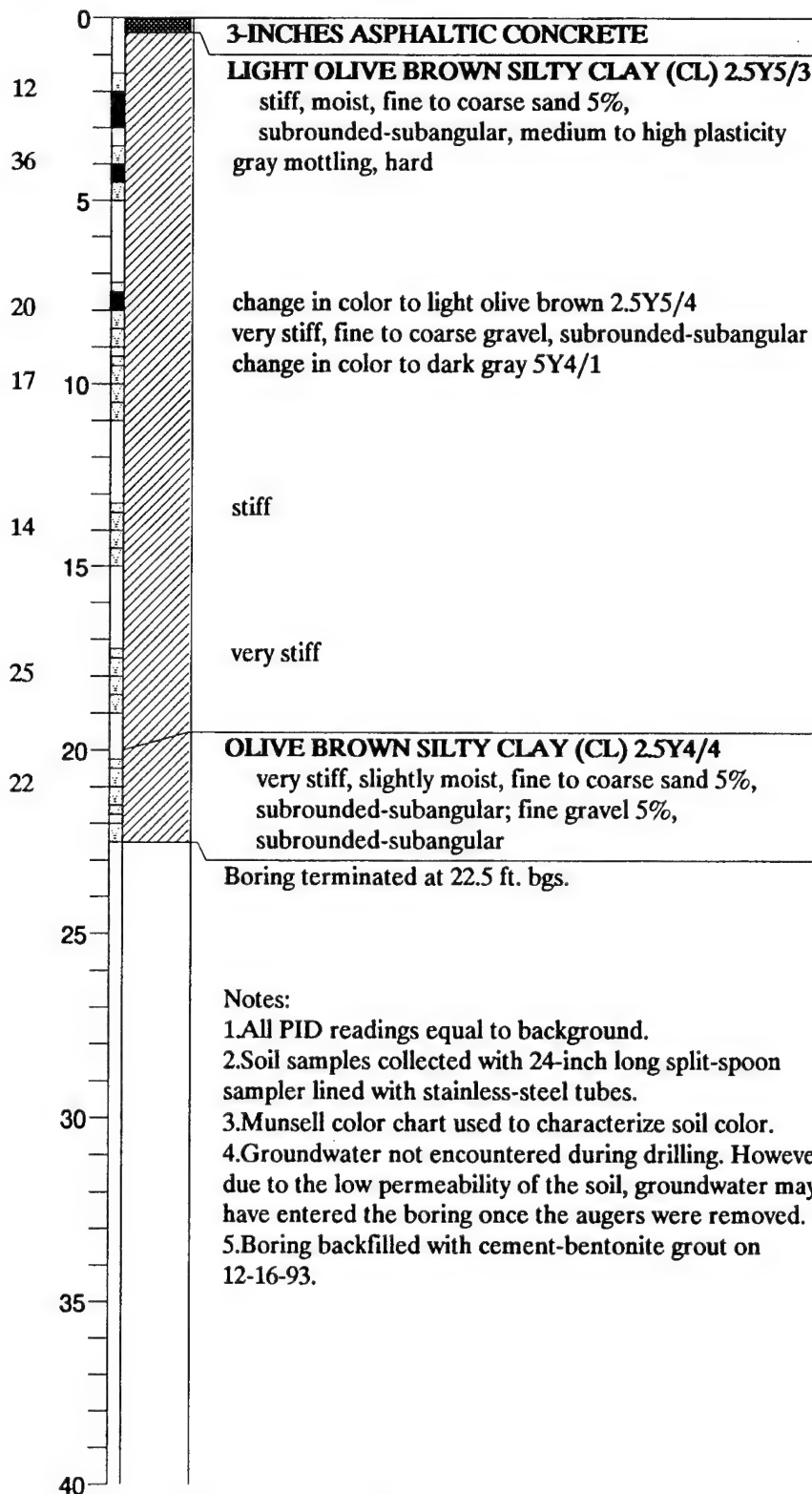
Phase I EI Report  
IN4 210 090 003  
September 18, 1995

## **Appendix H**

### **BORING LOGS AND WELL CONSTRUCTION DIAGRAMS**

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B  
ELEVATION 846.5 ft. DATE 12/16/93



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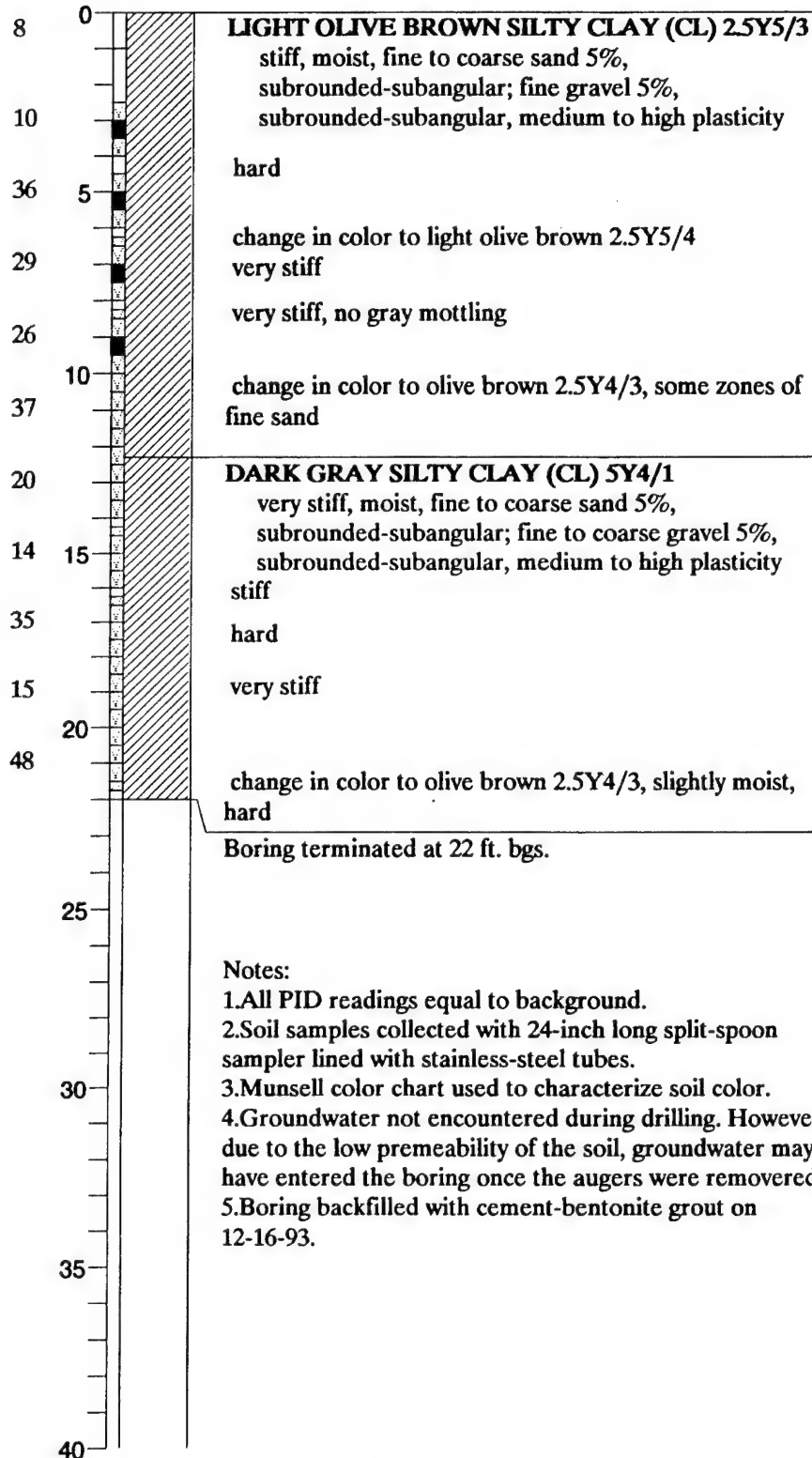
Prepared for:  
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Aberdeen Proving Ground, Maryland  
  
Fort Benjamin Harrison  
Marion County, Indiana

Figure H1  
Log of Boring EI001SB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 847.1 ft. DATE 12/16/93



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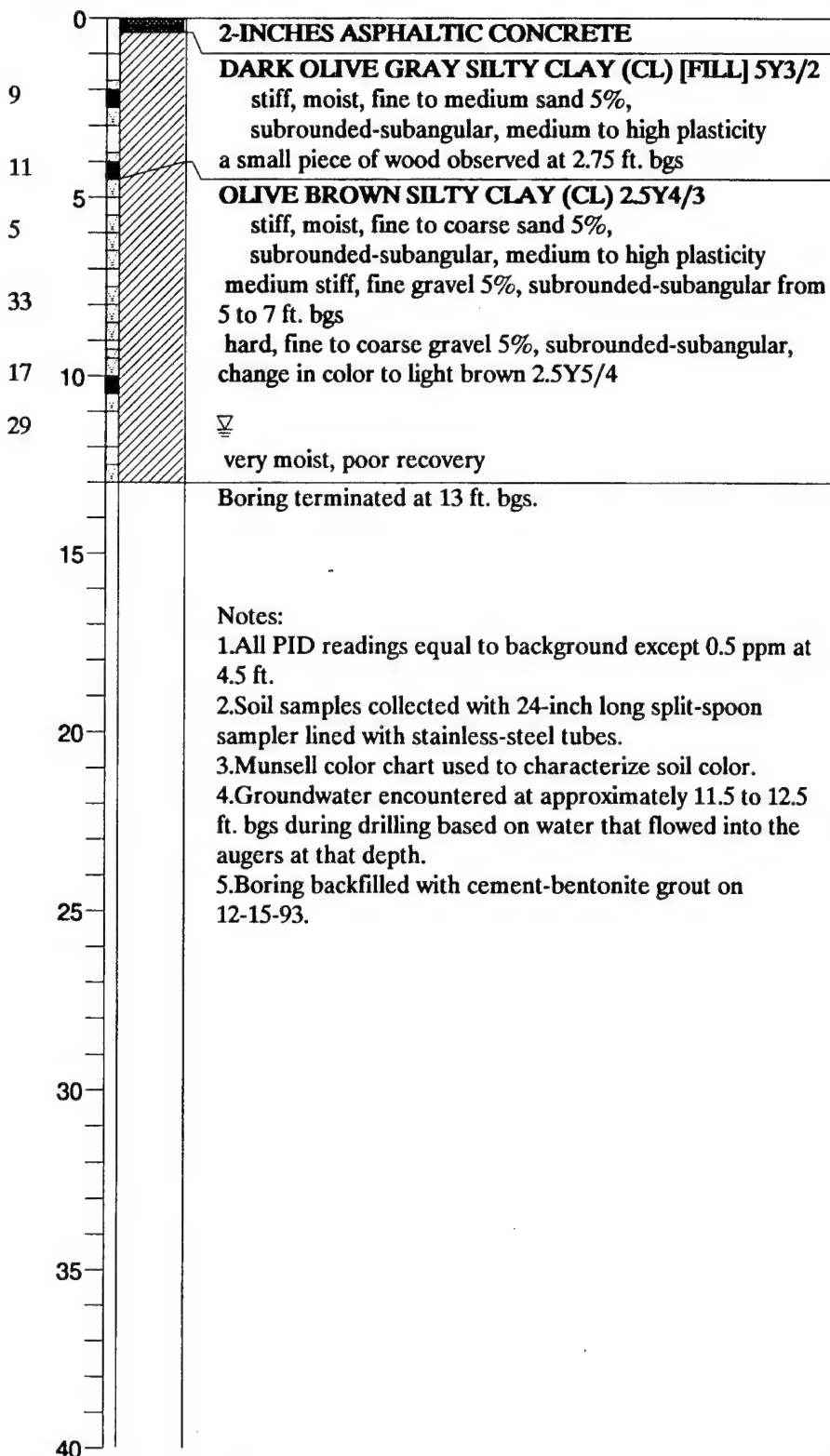
Figure H2

Log of Boring El001SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 847.9 ft. DATE 12/15/93



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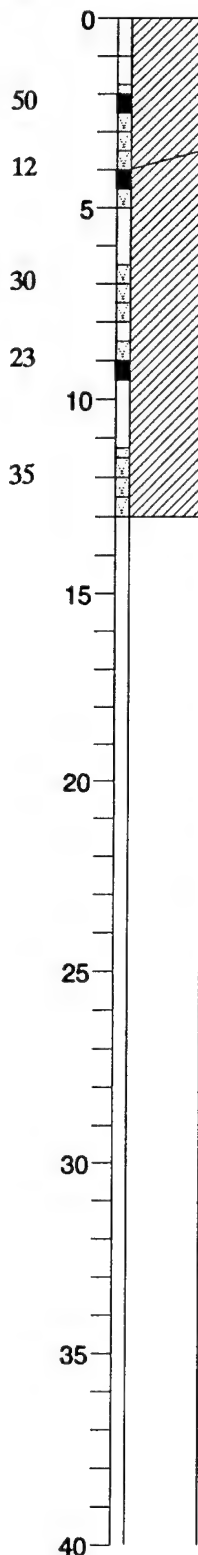
Figure H3

Log of Boring EI001SB003

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 847.9 ft. DATE 1/24/94



**DARK OLIVE GRAY SILTY CLAY (CL) [FILL] 5Y3/2**

hard, moist, fine to medium sand 5%,  
subrounded-subangular, medium plasticity  
black wood chips  
fine gravel 5%, subrounded-subangular

**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/3**

stiff, moist, fine to coarse sand 5%,  
subrounded-subangular, medium to high plasticity  
change in color to light olive brown 2.5Y5/4, fine to coarse  
gravel 5%, subrounded-subangular, increase in sand  
content, very stiff



change in color to olive brown 2.5Y4/3  
slight increase in soil moisture content

Boring terminated at 13 ft. bgs.

**Notes:**

1. All PID readings equal to background except 0.5 ppm at 1.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 11 ft. bgs during drilling. No distinct water bearing unit was observed.
5. Boring backfilled with cement-bentonite grout on 1-24-95.

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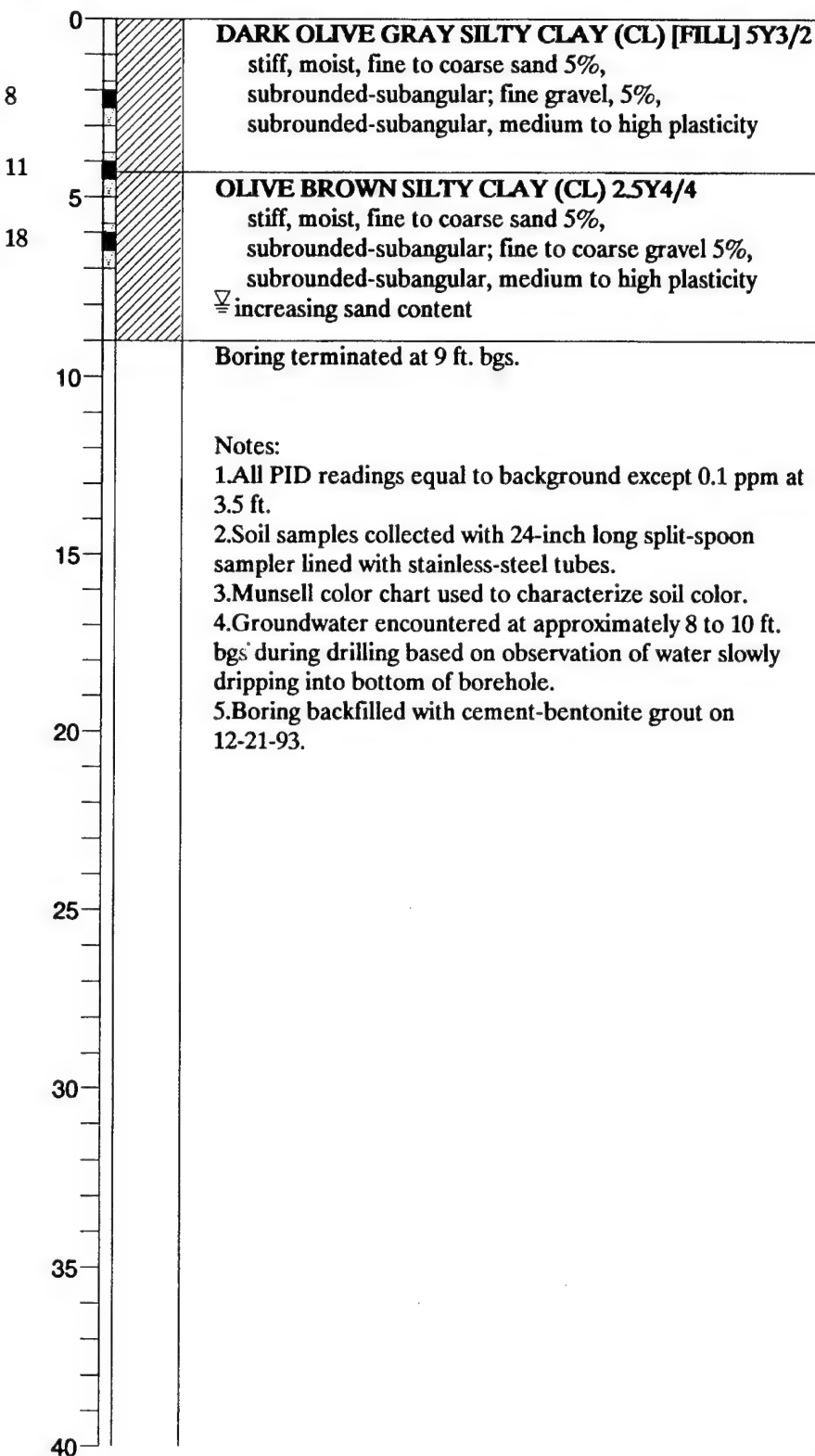
Figure H4

Log of Boring EI001SB03A

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 849.0 ft. DATE 12/21/93



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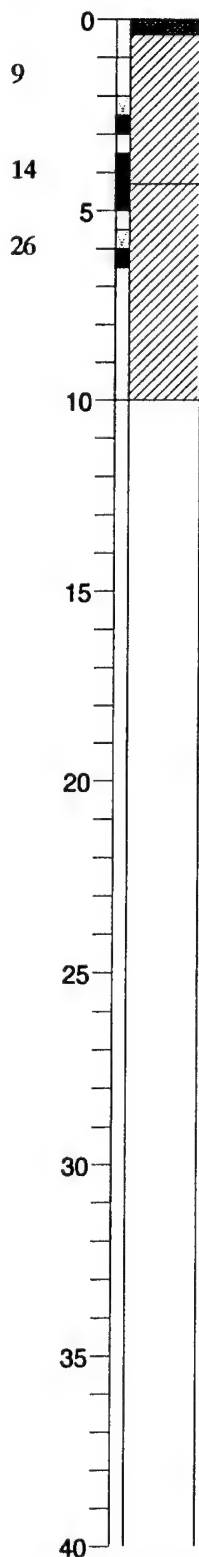
Figure H5

Log of Boring EI001SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 847.5 ft. DATE 12/19/93



**3-INCHES OF ASPHALTIC CONCRETE**

**DARK OLIVE GRAY SILTY CLAY (CL) 2.5Y5/4**

stiff, moist, fine to coarse sand 5%,  
subrounded-subangular, medium to high plasticity

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y5/4**

stiff, moist, fine to coarse sand 5%,  
subrounded-subangular; fine gravel 5%,  
subrounded-subangular, medium to high plasticity  
∇ increasing sand content, hard  
slightly increasing soil moisture content

Boring terminated at 10 ft. bgs.

**Notes:**

- 1.All PID readings equal to background.
- 2.Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
- 3.Munsell color chart used to characterize soil color.
- 4.Groundwater encountered at approximately 8 to 10 ft. bgs during drilling based on water entering borehole after augers were raised to 2 to 3 ft. bgs.
- 5.Boring backfilled with cement-bentonite grout on 12-19-93.

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Figure H6

Log of Boring EI001SB005

TOP OF CASING

ELEVATION **856.96** ft.

EQUIPMENT

**Summit CME 75-B**

ELEVATION **854.45** ft.

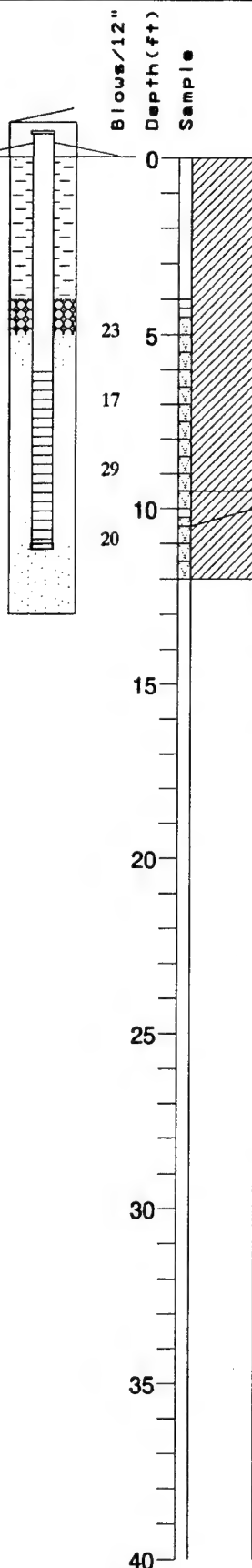
DATE **12/17/93**

**GROUND SURFACE**

Top of casing at 2.35 ft. above  
ground level, bentonite-cement  
seal 0 to 4.0 ft.  
10-in. dia. borehole 0 to 13 ft.  
4-in.-ID, Schedule 40 PVC blank  
casing +2.35 to 6 ft.  
Bentonite pellet seal 4 to 5 ft.  
Best Silica 620 sandpack 5 to 13 ft.

4-in.-ID slotted screen (0.01-in.)  
6 to 11 ft.

Bottom well cap at 11.1 ft.



**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y5/4**  
moist, fine to coarse sand 5%, subrounded-subangular;  
fine to coarse gravel 5%, subrounded-subangular,  
medium to high plasticity

very stiff, fine to coarse sand, 5% fine, 5% medium to  
coarse, subrounded-subangular

**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/3**  
very stiff, moist, fine to coarse sand 5%,  
subrounded-subangular; fine to coarse gravel 5%,  
subrounded-subangular, medium to high plasticity

**DARK GRAY SILTY CLAY (CL) 5Y4/1**  
very stiff, moist, fine to coarse sand 5%,  
subrounded-subangular; fine to coarse gravel 5%,  
subrounded-subangular

Boring terminated at 12.0 ft. bgs.

**Notes:**

- 1.All PID readings equal to background.
- 2.Soil samples collected with 24-inch long split-spoon  
sampler lined with stainless-steel tubes.
- 3.Munsell color chart used to characterize soil color.
- 4.No distinct water bearing unit was encountered.  
However, within the light olive brown silty clay unit, very  
moist zones were observed.
- 5.Boring EI001MW001 converted to monitoring well  
EI001MW001 on 12-18-93.

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**Figure H7**

Log of Boring and  
Well Completion Diagram for  
Well EI001MW001



TOP OF CASING

ELEVATION 851.99 ft.

EQUIPMENT

Summit CME 75-B

ELEVATION 852.27 ft.

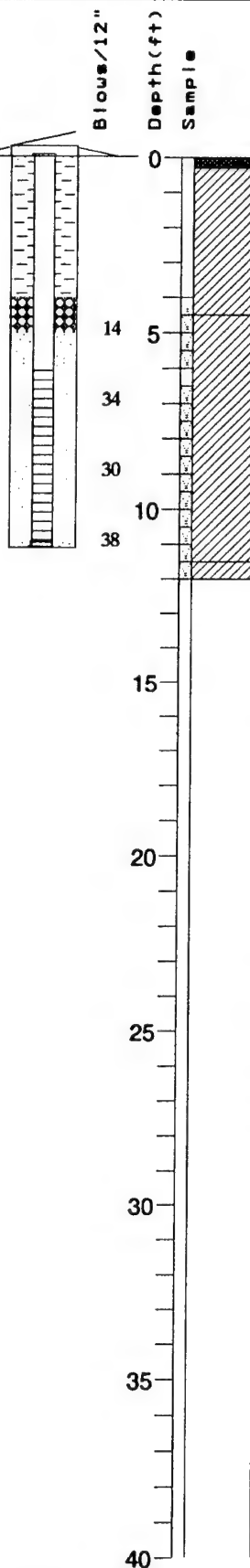
DATE 12/17/93

**GROUND SURFACE**

Top of casing at 0.2 ft. below ground level, bentonite-cement seal 0 to 4.0 ft.  
10-in. dia. borehole 0 to 12 ft.  
4-in.-ID Schedule 40 PVC blank casing 0.2 to 6 ft.  
Bentonite pellet seal 4 to 5 ft.  
Best Silica 620 sandpack 5 to 11 ft.

4-in.-ID slotted screen (0.01-in.) 6 to 11 ft.

Bottom well cap at 11.1 ft.



**2-INCH ASPHALTIC CONCRETE**

**DARK OLIVE SILTY CLAY (CL) 5Y3/2**

moist, fine to coarse sand 5%, subrounded-subangular, medium plasticity  
change in color to olive 5Y4/3 at approximately 2 to 3 ft. bgs.

**LIGHT OLIVE BROWN SILTY CLAY WITH SAND (CL) 2.5Y5/4**

stiff, moist to very moist (in sandier zones), fine to coarse sand, 10% fine, 5% medium to coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular, medium plasticity  
hard from 6 to 8 ft. bgs  
very stiff from 8 to 10 ft. bgs

**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/4**

hard, moist, fine to coarse sand 5%, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular

Boring terminated at 12.0 ft. bgs.

**Notes:**

1. All PID readings equal to background except 2.0 ppm at 1.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. No distinct water bearing unit was encountered. However, within the light olive brown silty clay with sand unit, very moist zones were observed.
5. Boring EI001MW002 converted to monitoring well EI001MW002 on 12-17-93.

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**Figure H8**

Log of Boring and  
Well Completion Diagram for  
Well EI001MW002

TOP OF CASING

ELEVATION **852.19** ft.

EQUIPMENT **Summit CME 75-B**

ELEVATION **850.07** ft. DATE **12/19/93**

**GROUND SURFACE**

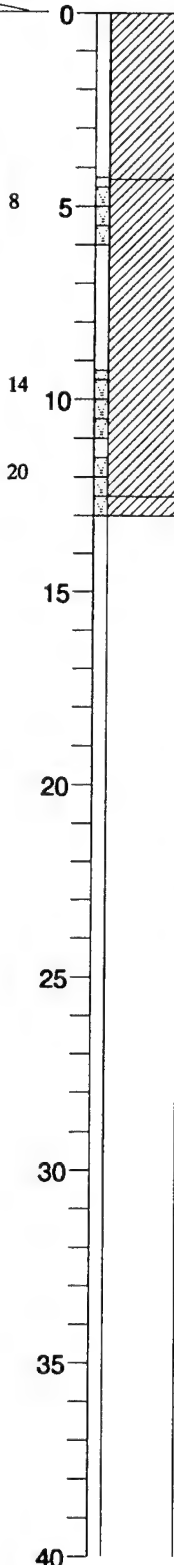
Top of casing at 2.35 ft. above ground level, bentonite-cement seal 0 to 4.0 ft.  
10-in. dia. borehole 0 to 13 ft.  
4-in.-ID Schedule 40 PVC blank casing +2.35 to 6 ft.  
Bentonite pellet seal 4 to 5 ft.  
Best Silica 620 sandpack 5 to 13 ft.

4-in.-ID slotted screen (0.01-in.) 6 to 11 ft.

Bottom well cap at 11.1 ft.



Blows/12"  
Depth (ft)  
Sample



**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/4**  
moist, fine to coarse sand 5%, subrounded-subangular, medium to high plasticity

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y5/4**  
stiff, moist, fine to coarse sand, 5% fine, 5% medium to coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular, medium to high plasticity

increasing sand content

**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/3**  
very stiff, moist, fine to coarse sand 5%, subrounded-subangular, medium to high plasticity

Boring terminated at 13.0 ft. bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. No distinct water bearing unit observed and no wet/saturated soil sample collected; however, very moist zones within the light olive brown silty clay unit were observed.
5. Boring EI001MW003 converted to monitoring well EI001MW003 on 12-19-93.

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**Figure H9**

Log of Boring and  
Well Completion Diagram for  
Well EI001MW003

TOP OF CASING

ELEVATION 852.00 ft.

EQUIPMENT

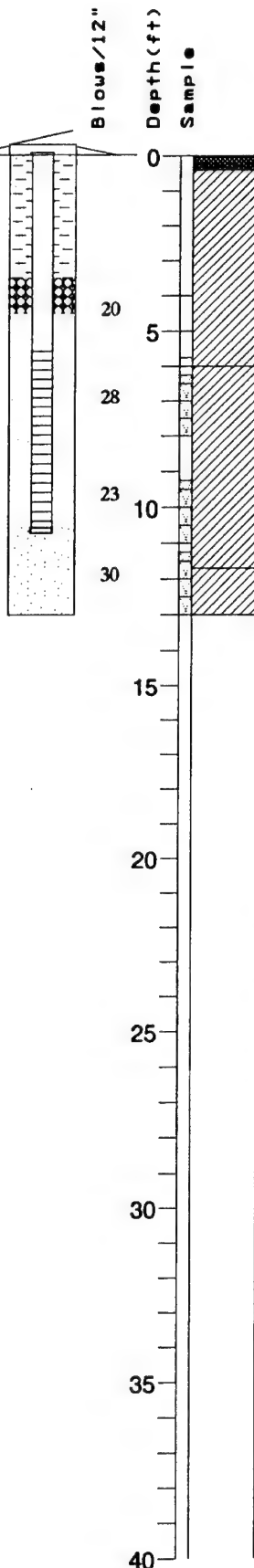
Summit CME 75-B

ELEVATION 852.46 ft.

DATE 12/18/93

**GROUND SURFACE**

Top of casing at 0.3 ft. below ground level, bentonite-cement seal 0 to 3.5 ft.  
10-in. dia. borehole 0 to 13 ft.  
4-in.-ID Schedule 40 PVC blank casing 0.2 to 5.5 ft.  
Bentonite pellet seal 3.5 to 4.5 ft.  
Best Silica 620 sandpack 4.5 to 13 ft.  
  
4-in.-ID slotted screen (0.01-in.) 5.5 to 10.5 ft.  
  
Bottom well cap at 10.6 ft.



**2 to 3-INCHES ASPHALTIC CONCRETE**

**LIGHT OLIVE BROWN SILTY CLAY (CL) 25Y5/4**  
moist, fine to coarse sand 5%, subrounded-subangular;  
fine to coarse gravel 5%, subrounded-subangular,  
medium to high plasticity  
change in color to very dark gray 5Y3/1 at 3.5 ft. bgs, and  
then to olive 5Y4/3, very moist

**LIGHT OLIVE BROWN SILTY CLAY (CL) 25Y5/3**  
very stiff, moist, fine to coarse sand, 5% fine, 5%  
medium to coarse, subrounded-subangular; fine to  
coarse gravel 5%, subrounded-subangular, medium to  
high plasticity

**OLIVE BROWN SILTY CLAY (CL) 25Y4/3**  
hard, moist, fine to coarse sand 5%,  
subrounded-subangular; fine to coarse gravel 5%,  
subrounded-subangular

Boring terminated at 13.0 ft. bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling although water was present inside augers when they were pulled up to 2 ft. bgs.
5. Boring EI001MW004 converted to monitoring well EI001MW004 on 12-18-93.

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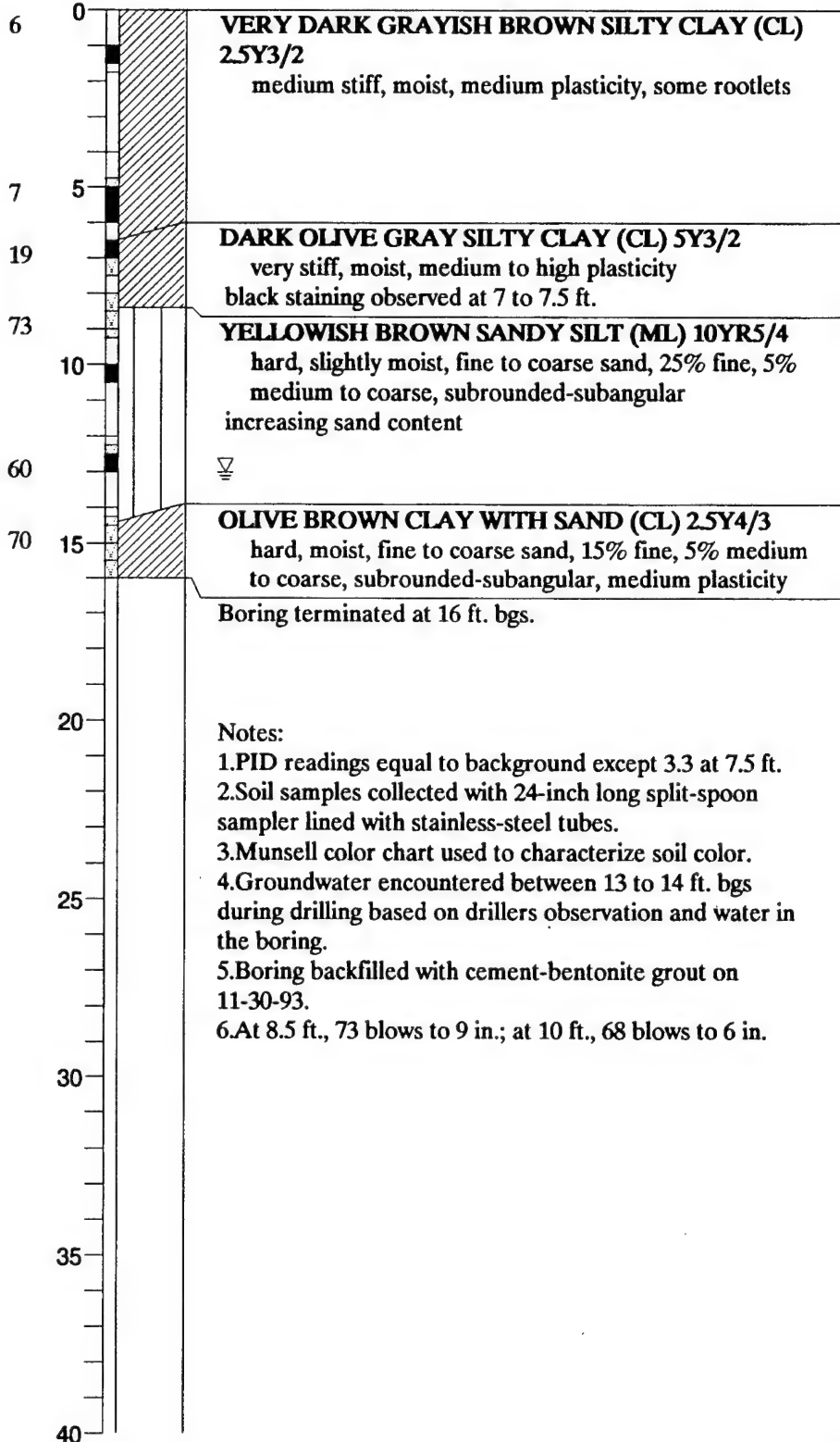
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Figure H10

Log of Boring and  
Well Completion Diagram for  
Well EI001MW004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B  
ELEVATION 843.8 ft. DATE 11/30/93



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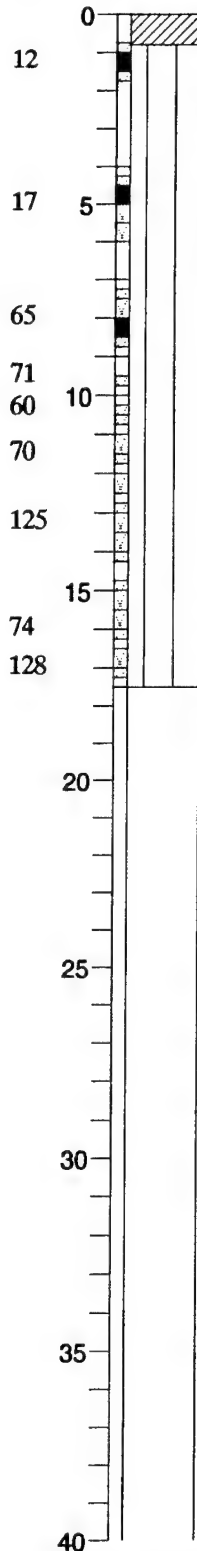
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Figure H11  
Log of Boring EI003SB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 848.5 ft. DATE 12/1/93



**VERY DARK GRAYISH BROWN SILTY CLAY (CL)**  
**2.5Y3/2**

stiff, moist, medium to high plasticity, some rootlets

**DARK YELLOWISH BROWN SILT WITH SAND (ML)**  
**10YR4/6**

stiff, moist, fine to medium sand, 10% fine, 5%  
medium, subrounded-subangular

1-inch thick silty sand layer at 1.75 ft.

very stiff, fine gravel 5%, subrounded-subangular at 4 ft.  
increasing sand content, hard

change color to brown 1.0Y4/3

change in color to grayish brown 10YR5/2, fine to  
medium sand, 10% fine, 5% medium,  
subrounded-subangular, medium plasticity

increasing sand content

Boring terminated at 17.5 ft. bgs.

**Notes:**

1. PID readings (in ppm) equal to background except 0.2 at 1.5 ft. and 0.5 at 9.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling. This boring was left open overnight to see if any groundwater would enter. When boring was checked the following day (12-2-93) less than 1-inch of mud was in the bottom. It was determined that this boring did not intersect a water-bearing zone so the boring was backfilled.
5. Boring backfilled with cement-bentonite grout on 12-2-93.
6. At 9 ft., 71 blows to 11 in.; at 11 ft., 70 blows to 10 in.

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Figure H12

Log of Boring EI003SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

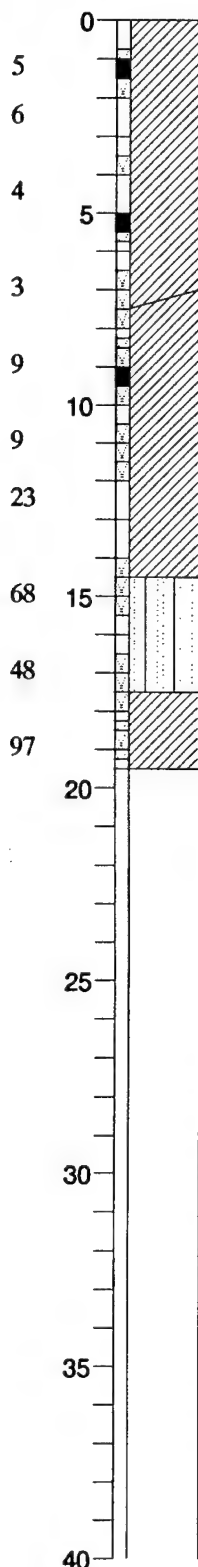
Summit CME 75-B

ELEVATION

853.0 ft.

DATE

12/2/93



**DARK GRAYISH BROWN SILTY CLAY (CL) 2.5Y4/2**  
medium stiff, moist, medium to high plasticity, fine to medium sand 5%, subrounded-subangular, some rootlets

some black stains, change in color to very dark gray 5Y3/1

**OLIVE GRAY SILTY CLAY (CL) 5Y5/2**

soft, moist to very moist, fine to medium sand 5%, subrounded-subangular; coarse gravel 5%, subangular, medium to high plasticity

a piece of plastic was found at approximately 8.5 to 9.0 ft. [FILL?]

**DARK GRAYISH BROWN SILTY SAND (SM) 2.5Y4/2**

very dense, very moist to wet, fine to coarse sand, subrounded-subangular

predominantly fine to medium grained sand

**OLIVE BROWN SILTY CLAY WITH SAND (CL) 2.5Y4/3**

hard, moist, fine to coarse sand, 10% fine, 5% medium, subrounded-subangular, medium plasticity

Boring terminated at 19.5 ft. bgs.

Notes:

1. PID readings (in ppm) equal to 2.0 at 5.5 ft., 89 at 7 ft. and 1.5 at 16.5 ft.

2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.

3. Munsell color chart used to characterize soil color.

4. Groundwater encountered at 14.5 ft. during drilling based on wet soil encountered at that depth.

5. Boring EI003SB003 converted to monitoring well EI003MW003 on 12-2-93.

6. This well was abandoned after it was damaged during soil remediation efforts at this site. The well was abandoned by drilling out the casing, then backfilling with cement-bentonite grout on 2-6-94. The replacement for this well was installed in Boring EI003SB03C.

7. At 8.5 ft., 97 blows to 9 in.

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Figure H13

Log of Boring EI003SB003

Blogs/12"  
Depth (ft)  
Sample

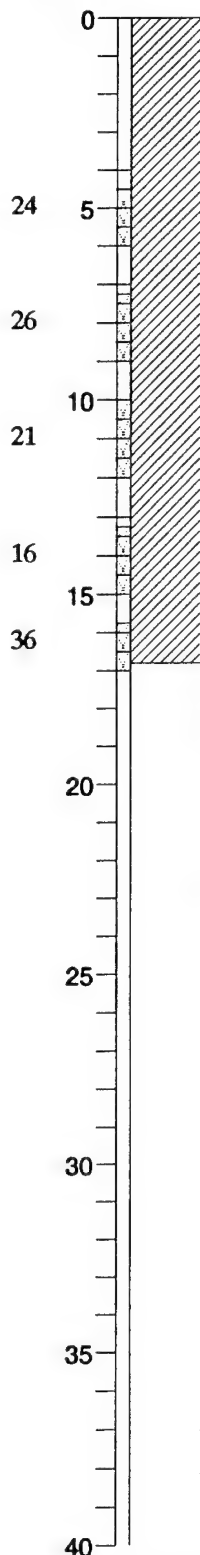
EQUIPMENT

Summit CME 75-B

ELEVATION

NA ft.

DATE 1/26/94



**DARK GRAYISH BROWN SILTY CLAY (CL) 2.5Y4/2**  
moist, fine to coarse sand 5%, subrounded-subangular,  
medium to high plasticity  
change in color to brown 10YR4/3 at approximately 2.5 ft.

change in color to light olive brown 2.5Y5/13, very stiff;  
fine to coarse sand, 5% fine, 5% medium to coarse,  
subrounded-subangular; fine to coarse gravel 5%,  
subrounded-subangular, medium to high plasticity  
slightly increasing sand content, very moist

change in color to olive brown 2.5Y4/3, very stiff, moist,  
fine to coarse sand 5%

change in color to olive brown 2.5Y4/3, hard, moist, fine  
to coarse sand, 5% fine, 5% medium to coarse, low to  
medium plasticity

Boring terminated at 17 ft. bgs.

Notes:

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling. No water bearing unit(s) were drilled through before encountering hard clay layer.

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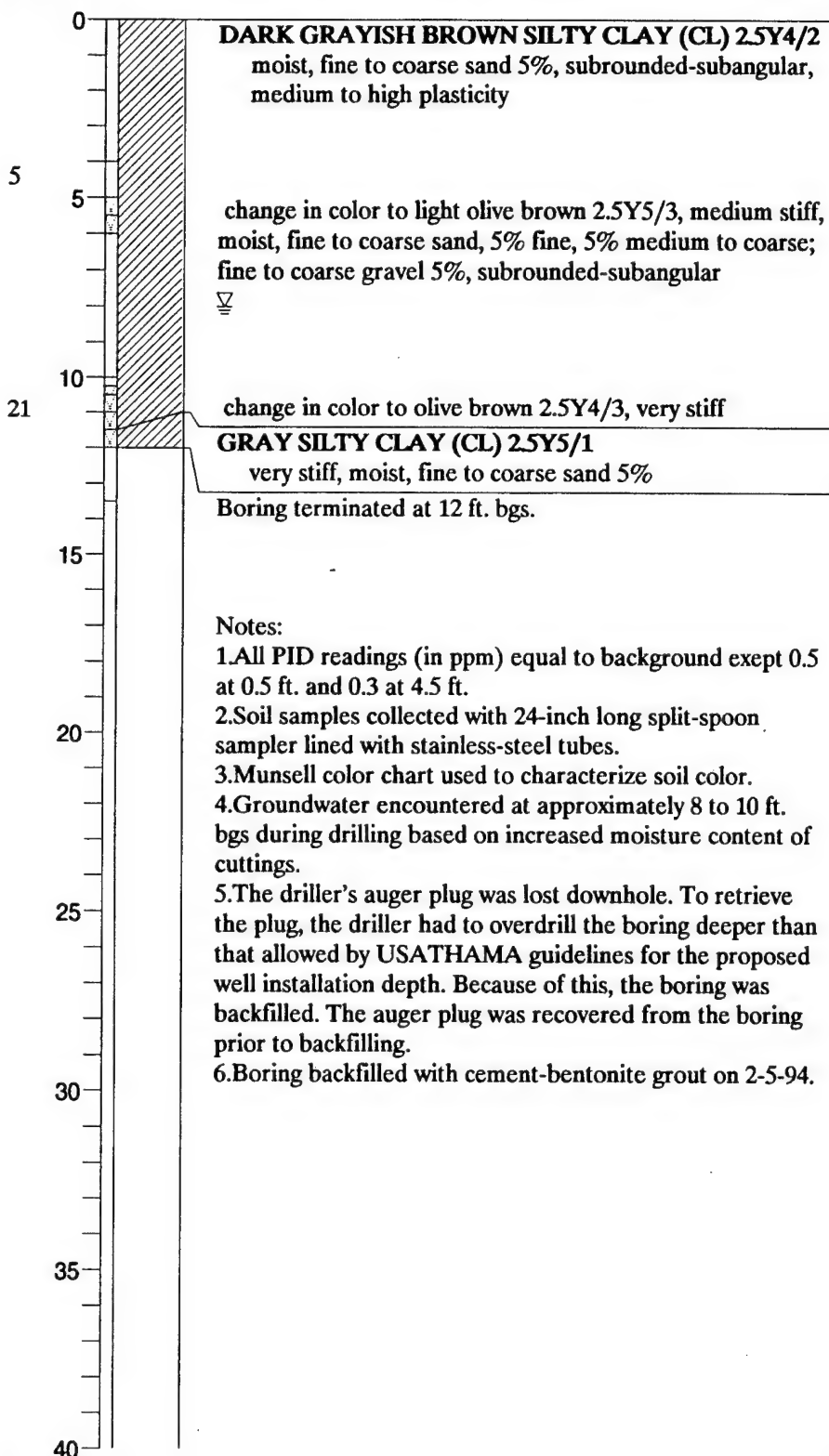
Figure H14

Log of Boring EI003SB03A

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION NA ft. DATE 2/5/94



Notes:

1. All PID readings (in ppm) equal to background except 0.5 at 0.5 ft. and 0.3 at 4.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 8 to 10 ft. bgs during drilling based on increased moisture content of cuttings.
5. The driller's auger plug was lost downhole. To retrieve the plug, the driller had to overdrill the boring deeper than that allowed by USATHAMA guidelines for the proposed well installation depth. Because of this, the boring was backfilled. The auger plug was recovered from the boring prior to backfilling.
6. Boring backfilled with cement-bentonite grout on 2-5-94.

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Figure H15

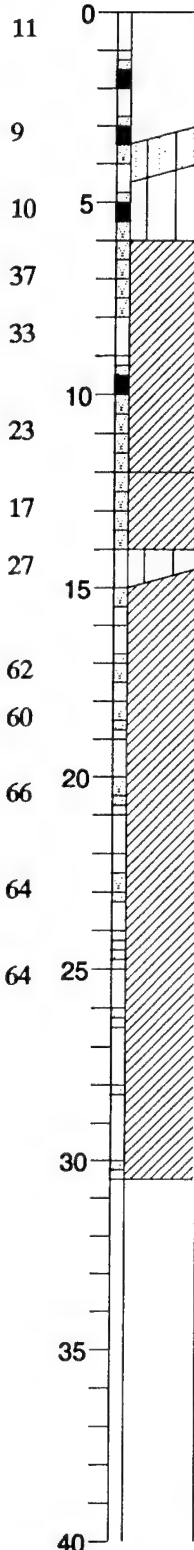
Log of Boring EI003SB03B



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT **Summit CME 75-B**

ELEVATION **851.3** ft. DATE **11/20/93**



**YELLOWISH BROWN SAND (SP) 10YR5/6**  
medium dense, moist, fine to medium sand; fine gravel  
5%, subangular

**DARK BROWN SILTY SAND (SM) 7.5YR3.3**  
loose, moist, fine to medium sand; fine to coarse gravel  
5%, subrounded-subangular, with cobbles

**DARK YELLOWISH BROWN CLAYEY SILT (ML) 10YR4/4**  
stiff, moist, fine gravel <5%, subangular, low plasticity

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y5/3**  
hard, moist, fine sand <5%; fine gravel <5%,  
subrounded-subangular, medium plasticity  
very stiff

**DARK OLIVE GRAY CLAY (CL) 5Y3/2**  
very stiff, moist, fine gravel <5%, subangular, medium  
to high plasticity

**DARK YELLOWISH BROWN SANDY SILT (ML) 10YR4/6**  
very stiff, moist, fine to medium sand, fine gravel 5%,  
low plasticity

**DARK OLIVE GRAY SANDY CLAY (CL) 5Y3/2**  
hard, moist, fine to coarse sand 30%; fine to coarse  
gravel <5%, subangular, few cobbles, medium plasticity  
sand and gravel content increasing at 17 to 17.5 ft.  
slightly moist below 20.5 ft.  
difficult to drill due to hardness of soil

soil is almost dry; decreasing sand content  
Boring terminated at 30.5 ft. bgs.

**Notes:**

1. PID readings (in ppm) equal to 0.2 at 7.5 ft., 0.1 at 9.5 ft., 0.1 at 10.5 ft., and 0.1 at 13.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with cement-bentonite grout on 11-20-93.
6. At 16.5 ft., 62 blows to 11 in.; at 18 ft., 60 blows to 10 in.; at 20 ft., 66 blows to 10 in.; at 22.5 ft., 64 blows to 10 in.; at 24 ft., 64 blows to 11 in.

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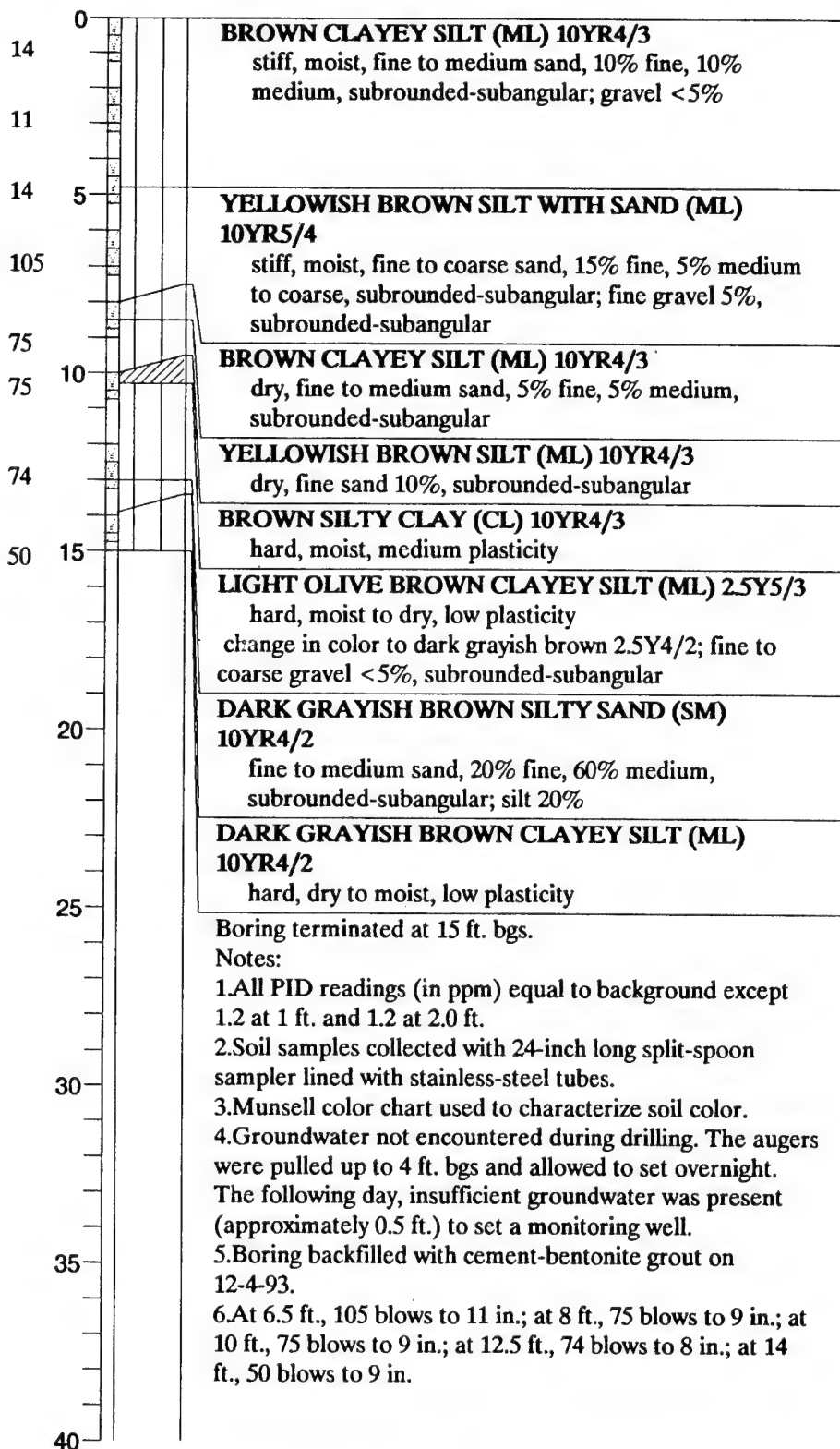
Figure H16

Log of Boring EI003SB005

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750 Mobile ATV

ELEVATION NA ft. DATE 12/3/93



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Figure H17

Log of Boring EI003SB007

TOP OF CASING

ELEVATION 843.45 ft.

EQUIPMENT

Summit CME 75-BELEVATION 841.15 ft.DATE 11/21/93**GROUND SURFACE**

Top of casing at 2.25 ft. above  
ground level, bentonite-cement  
seal 0 to 4.0 ft.

10-in. dia. borehole 0 to 13.5 ft.

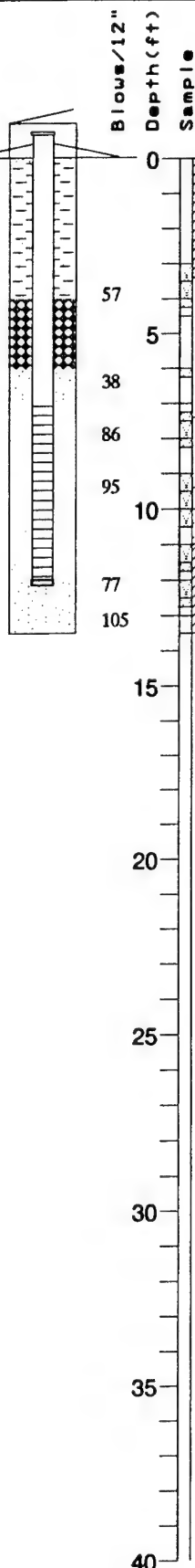
4-in.-ID Schedule 40 PVC blank  
casing +2.25 to 7 ft.

Bentonite pellet seal 4 to 6 ft.

Best Silica 620 sandpack 6 to 13.5 ft.

4-in.-ID slotted screen (0.01-in.)  
7 to 12 ft.

Bottom well cap at 12.1 ft.



**VERY DARK GRAYISH BROWN SILTY CLAY (CL)**  
**2.5Y3/2**

very moist, medium to high plasticity, some rootlets

**DARK YELLOWISH BROWN SILT WITH SAND (ML)**  
**10YR4/6**

hard, moist, fine to coarse sand, 20% fine, 5% medium  
to coarse, subrounded-subangular; fine gravel 5%,  
subrounded-subangular  
slightly decreasing gravel content <5%

**YELLOWISH BROWN SILTY SAND (SM) 10YR5/4**

hard, very moist, fine to medium sand,  
subrounded-subangular  
1-inch thick clay lens at 8.0 ft., dark yellowish brown  
**10YR4/4**

**DARK YELLOWISH BROWN SANDY SILT (ML)**  
**10YR4/4**

hard, moist, fine to coarse sand, 20% fine, 10% medium  
to coarse

**YELLOWISH BROWN SILTY SAND (SM) 10YR5/4**

hard, very moist, fine to medium sand,  
subrounded-subangular; fine gravel 5%,  
subrounded-subangular

**OLIVE BROWN CLAY WITH SAND (CL) 2.5Y4/3**

hard, moist, fine to coarse sand, 10% fine, 5% medium  
to coarse, subrounded-subangular; fine gravel 5%,  
subrounded-subangular, medium plasticity

Boring terminated at 13.5 ft. bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 7.5 or 10 ft. bgs during drilling based on very moist soil encountered at those depths.
5. Boring EI003SB006 converted to monitoring well EI003MW001 on 11-21-93.
6. At 3.5 ft., 57 blows to 11 in.; at 6 ft., 38 blows to 5 in.; at 7.5 ft., 86 blows to 9 in.; at 11 ft., 77 blows to 8 in.; at 12 ft., 105 blows to 8 in.

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Figure H18

Log of Boring EI003SB006 and  
Well Completion Diagram for  
Well EI003MW001

TOP OF CASING

ELEVATION **843.53** ft.

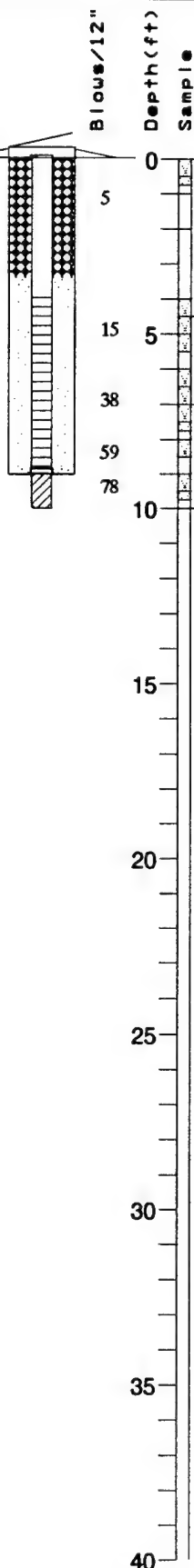
EQUIPMENT **Summit CME 750 Mobile ATV**

ELEVATION **841.23** ft. DATE **1/26/94**

**GROUND SURFACE**

Top of casing at 2.3 ft. above ground level  
10-in. dia. borehole 0 to 9 ft.  
4-in.-ID Schedule 40 PVC blank casing +2.3 to 3.9 ft.  
Bentonite pellet seal 0 to 3.4 ft.

Best Silica 620 sandpack 3.4 to 9 ft.  
4-in.-ID slotted screen (0.012-in.)  
3.9 to 8.9 ft.  
Bottom well cap at 9 ft.  
4-in.-dia. borehole 9 to 10 ft.  
Slough 9 to 10 ft.



**BROWN CLAYEY SILT (ML) 10YR5/3**  
medium stiff, moist, medium to low plasticity, rootlets

**BROWN SAND WITH CLAY AND GRAVEL (SP-SC) 10YR5/3**  
medium dense, saturated, fine to coarse sand, 15% fine, 30% medium, 25% coarse, subrounded-angular; fine to coarse gravel 15% fine, 5% coarse; clay 10%, some interbedded clayey sand

**YELLOWISH BROWN CLAYEY SILT (ML) 10YR5/4**  
hard, moist, fine to coarse gravel <10%,; fine to medium grained sand <10%, low plasticity

Boring terminated at 10 ft. bgs.

**Notes:**

1. PID readings (in ppm) equal to 0.2 at 0.5 ft., 0.1 at 4.5 ft., 0.2 at 5.0 ft., 0.1 at 6.5 ft., 0.1 at 7.0 ft., 0.4 at 7.5 ft., 0.2 at 8.0 ft. and 0.1 at 9.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at 4.5 ft. bgs during drilling based on the presence of water in the boring and on the sampler.
6. Boring EI003MW002 converted to monitoring well EI003MW002 on 1-26-94.
7. At 8 ft., 59 blows to 9 in.; at 9 ft., 78 blows to 9 in.

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**Figure H19**

Log of Boring and  
Well Completion Diagram for  
Well EI003MW002

TOP OF CASING

ELEVATION 853.42 ft.

EQUIPMENT

Summit CME 75-B

ELEVATION 853.68 ft.

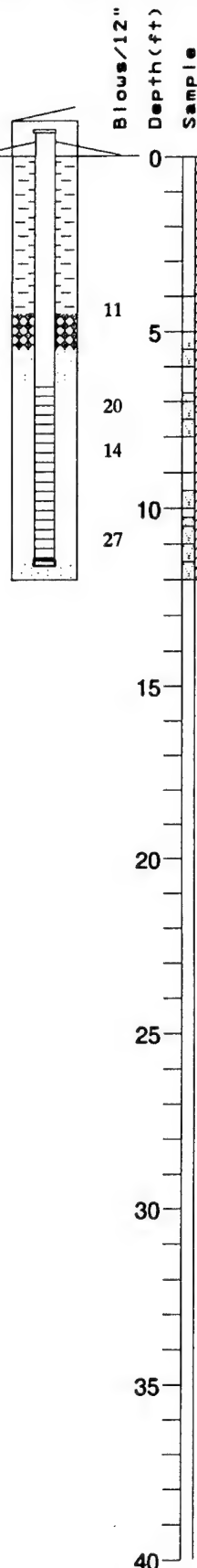
DATE 2/5/94

**GROUND SURFACE**

Top of casing at 0.2 ft. below  
ground level, bentonite-cement  
seal 0 to 4.5 ft.  
10-in. dia. borehole 0 to 12 ft.  
4-in.-ID Schedule 40 PVC blank  
casing 0.2 to 6.5 ft.  
Bentonite pellet seal 4.5 to 5.5 ft.

Best Silica 620 sandpack 5.5 to 12 ft.

4-in.-ID slotted screen (0.01-in.)  
6.5 to 11.5 ft.  
Bottom well cap at 11.6 ft.



**DARK GRAYISH BROWN SILTY CLAY (CL) 2.5Y4/2**  
moist, fine to coarse sand 5%, subrounded-subangular,  
medium to high plasticity

change in color to light olive brown silty clay 2.5Y5/4, stiff,  
moist, fine to coarse sand, 5% fine, 5% medium to coarse,  
subrounded-subangular; fine to coarse gravel 5%,  
subrounded-subangular

**GRAYISH BROWN SILT (ML) 2.5Y5/2**  
very stiff, very moist to wet, increasing silt content

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y4/3**  
stiff, moist, fine to coarse sand, 5% fine, 5% medium to  
coarse, subrounded-subangular; fine to coarse gravel  
5%, subrounded-subangular

change in color to olive brown 2.5Y4/3, hard, fine to  
coarse sand 5%, subrounded-subangular  
2-inch thick sand lens, wet, saturated at 11 ft.

**GRAY SILTY CLAY (CL) 2.5Y5/1**  
hard, moist, fine to coarse grained sand, medium to  
high plasticity

Boring terminated at 12 ft. bgs.

**Notes:**

- 1.All PID readings (in ppm) equal to background except 0.5 at 4.5 ft. and 0.2 at 6.5 ft.
- 2.Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
- 3.Munsell color chart used to characterize soil color.
- 4.Groundwater encountered at approximately 7.25 to 7.5 ft. bgs during drilling based on the wet silty unit encountered at that depth. This well replaces the well that was installed in Boring EI003SB003, but which was abandoned on 2-6-94 due to its damaged condition.
- 5.Boring EI003SB03C converted to monitoring well EI003MW003 on 2-5-94.

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Figure H20

Log of Boring EI003SB03C and  
Well Completion Diagram for  
Well EI003MW003

TOP OF CASING

ELEVATION **853.76** ft.

EQUIPMENT

**Summit CME 75-B**

ELEVATION **851.92** ft.

DATE **12/3/93**

**GROUND SURFACE**

Top of casing at 2.35 ft. above ground level, bentonite-cement seal 0 to 6.5 ft.

10-in. dia. borehole 0 to 19 ft.

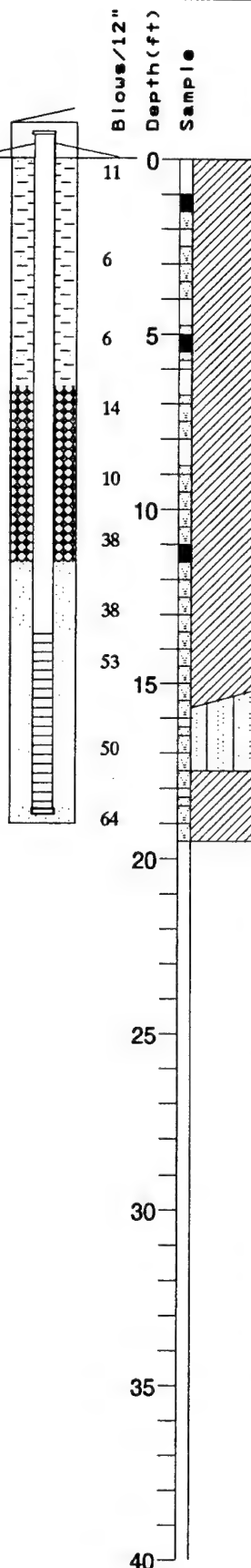
4-in.-ID Schedule 40 PVC blank casing +2.35 to 13.5 ft.

Bentonite pellet seal 6.5 to 11.5 ft.

Best Silica 620 sandpack 11.5 to 19 ft.

4-in.-ID slotted screen (0.01-in.) 13.5 to 18.5 ft.

Bottom well cap at 18.6 ft.



**DARK GRAYISH BROWN SILTY CLAY (CL) 2.5Y4/2**  
stiff, moist, fine to coarse sand 5%,  
subrounded-subangular, medium to high plasticity,  
some rootlets

tile fragments at 1.5 ft.

medium stiff, fine to coarse gravel 5%, subrounded  
change in color to light olive brown 2.5Y5/4

change in color to brown 10YR4/3

change in color to dark yellowish brown 10YR4/4

hard

slightly increasing moisture content and sand content

**OLIVE BROWN SILTY SAND (SM) 2.5Y4/3**

medium dense, very moist to wet, fine to coarse sand,  
subrounded-subangular

**OLIVE BROWN SILTY CLAY WITH SAND (CL) 2.5Y4/3**

hard, moist, fine to medium sand 15%, predominantly  
fine, subrounded-subangular

Boring terminated at 19.5 ft. bgs.

**Notes:**

1. All PID readings equal to background except 0.5 ppm at 1.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 15 to 15.5 ft. bgs during drilling based on wet soil encountered at that depth.
5. Boring EI003SB004 converted to monitoring well EI003MW004 on 12-3-93.
6. At 18.5 ft., 64 blows to 10 in.

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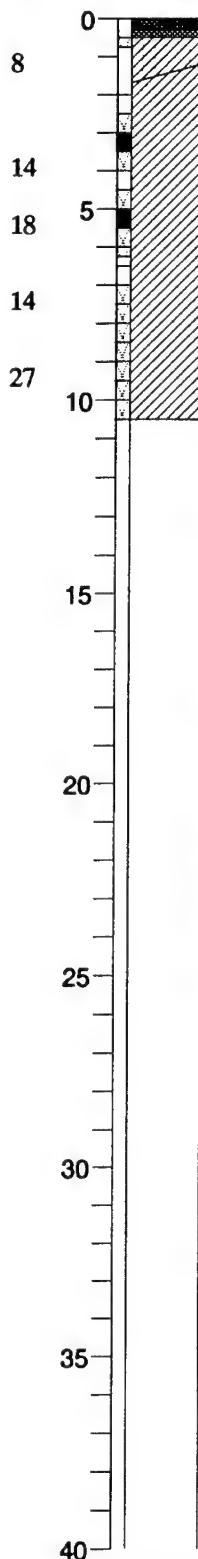
Figure H21

Log of Boring and  
Well Completion Diagram for  
Well EI003MW004

Blogs/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750 Mobile ATV

ELEVATION 858.6 ft. DATE 12/16/93



**ASPHALTIC CONCRETE 3-INCHES**

**CONCRETE 3-INCHES**

**BROWN CLAYEY SAND WITH GRAVEL (SC) 7.5YR4/3**

loose, moist, medium to coarse sand, 35% medium, 15% coarse, subrounded-subangular; fine to coarse gravel, 15% fine, 5% coarse, subrounded-subangular; fines 30%, mostly clay

**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/3**

stiff, moist, medium to high plasticity  
change in color to yellowish brown 10YR5/4, increasing sand content, fine to medium sand, 5% fine, 10% medium medium to coarse sand lens from 8 to 8.25 ft., wet change in color to gray 10YR5/1, very stiff at 9 ft.

Boring terminated at 10.5 ft. bgs.

**Notes:**

1. PID readings (in ppm) equal to 0.4 at 3.5 ft., 0.7 at 5.0 ft. and 0.1 at 7.0 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 8 ft. bgs during drilling based on the wet sand lens at that depth. Groundwater entered the boring when the augers were raised 3.0 ft. to 7.5 ft. bgs.
5. Boring backfilled with cement-bentonite grout on 12-16-93.

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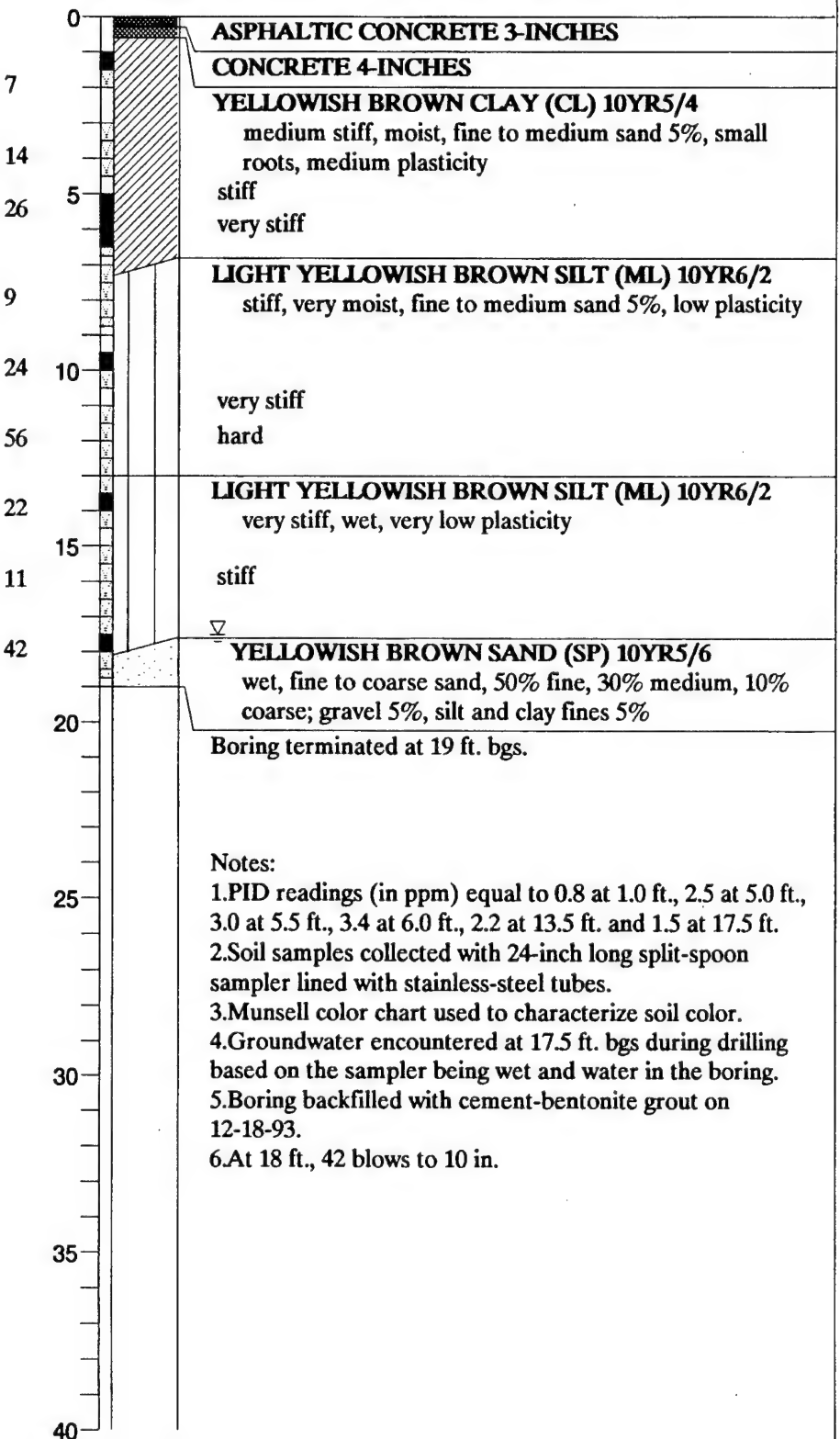
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Figure H22

Log of Boring EI004SB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750 Mobile ATV  
ELEVATION 858.4 ft. DATE 12/18/93



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Figure H23  
Log of Boring EI004SB002

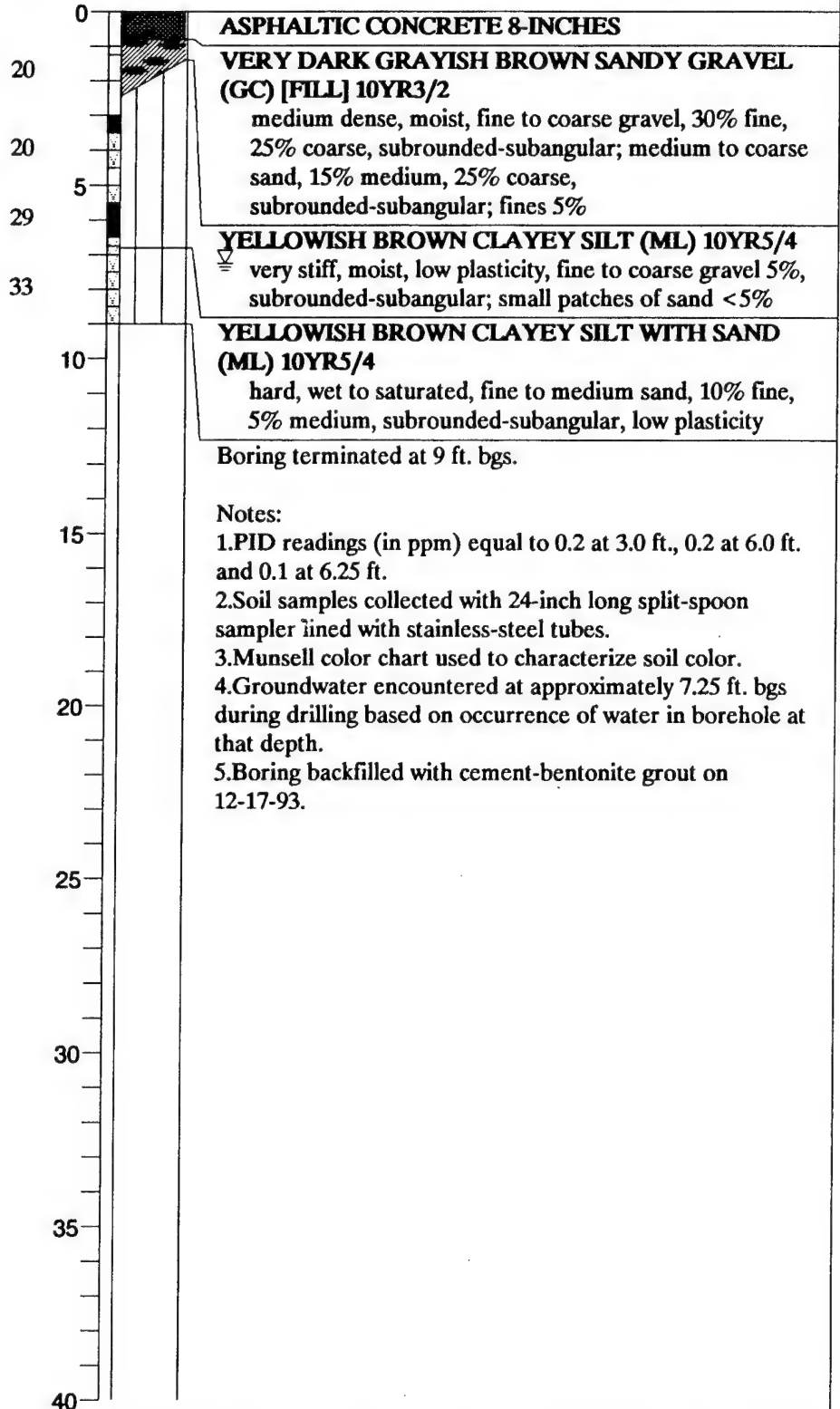


Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750 Mobile ATV

ELEVATION 858.2 ft.

DATE 12/17/93

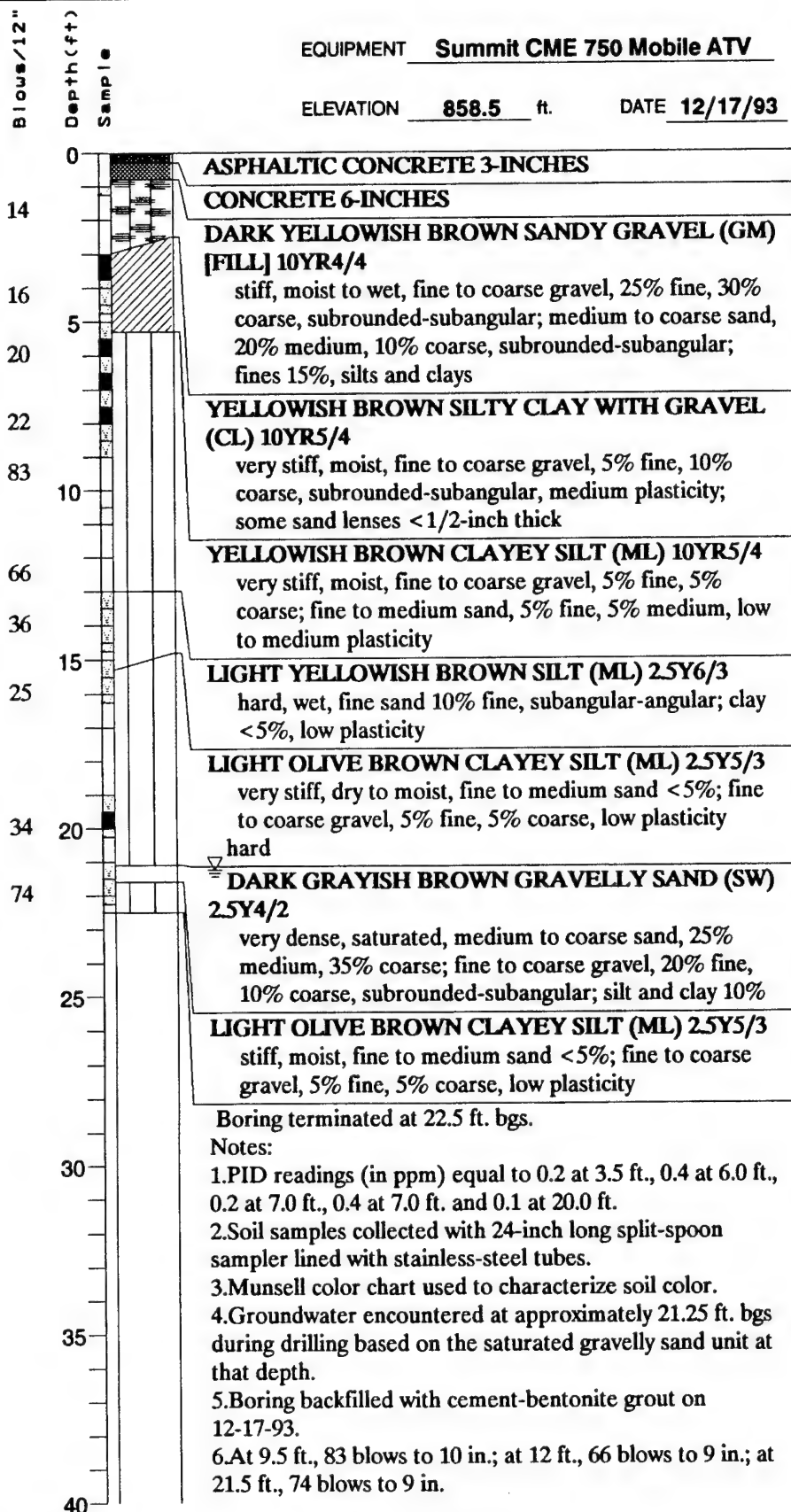


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Figure H24  
Log of Boring EI004SB003



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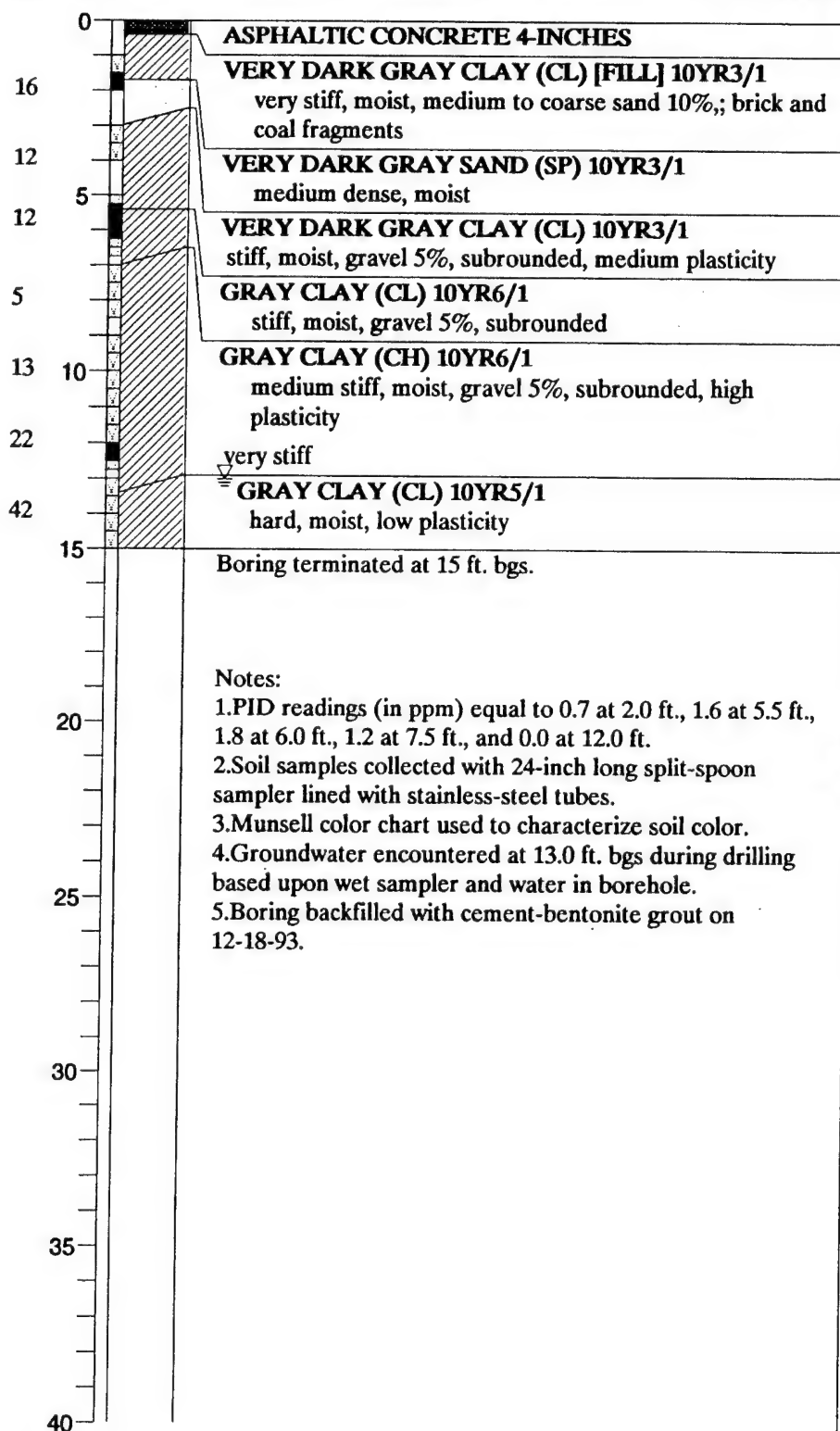
Figure H25

Log of Boring EI004SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750 Mobile ATV

ELEVATION 858.3 ft. DATE 12/18/93



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Figure H26

Log of Boring EI004SB005

TOP OF CASING

ELEVATION 859.15 ft.EQUIPMENT Summit CME 750 Mobile ATVELEVATION 857.25 ft. DATE 12/19/93**GROUND SURFACE**

Top of casing at 2.3 ft. above  
ground level, bentonite-cement  
seal 0 to 7.5 ft.

10-in. dia. borehole 0 to 25 ft.

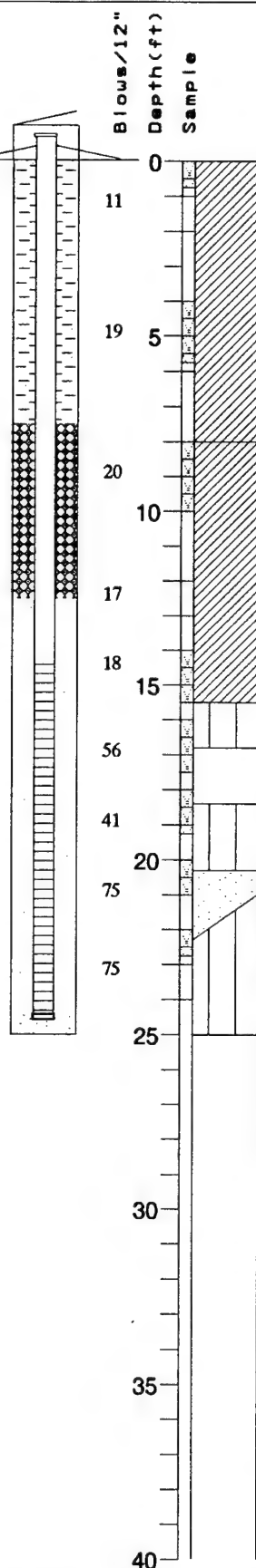
4-in.-ID Schedule 40 PVC blank  
casing +2.3 to 14.35 ft.

Bentonite pellet seal 7.5 to 12.5 ft.

Best Silica 620 sandpack 12.5 to 25 ft.

4-in.-ID slotted screen (0.01-in.)  
14.35 to 24.4 ft.

Bottom well cap at 24.5 ft.



**VERY DARK GRAYISH BROWN SILTY CLAY (CL) 10YR3/2**

stiff, moist, fine to coarse gravel <5%, medium plasticity, rootlets

change in color to brown 10YR5/3, very stiff

**YELLOWISH BROWN SILTY CLAY WITH GRAVEL (CL) 10YR5/4**

very stiff, moist, fine to coarse gravel, 5% fine, 10% coarse, subrounded-subangular, medium plasticity

no recovery

change in color to gray 10YR5/1

**GRAY CLAYEY SILT (ML) 10YR5/1**

very stiff, wet to saturated, fine to coarse gravel 5-10%, subrounded-subangular, low plasticity

**GRAY SAND WITH GRAVEL (SP) 10YR5/1**

very dense, saturated, medium to coarse sand, 25% medium, 50% coarse, subrounded-angular; fine to coarse gravel, 10% fine, 5% coarse, subrounded-angular; silts and clays 5%

**OLIVE BROWN CLAYEY SILT (ML) 2.5Y4/3**

hard, moist, fine to coarse gravel 5-10%, medium plasticity

**GRAYISH BROWN SAND WITH SILT (SP-SM) 2.5Y5/2**

very dense, wet to saturated, fine sand 90%, subrounded-rounded; silt 10%

**OLIVE BROWN CLAYEY SILT (ML) 2.5Y4/3**

hard, moist, fine to coarse gravel 5-10%, low plasticity

Boring terminated at 25 ft. bgs.

## Notes:

1. PID readings for soil samples were not recorded.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 16.0 ft. bgs during drilling based on presence of water on sampler.
5. Boring EI004MW001 converted to monitoring well EI004MW001 on 12-19-93.
6. At 20.5 ft., 75 blows to 9 in.; at 22 ft., 75 blows to 10 in.

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Figure H27

Log of Boring and  
Well Completion Diagram for  
Well EI004MW001

TOP OF CASING

ELEVATION **861.54** ft.

EQUIPMENT **Summit CME 750 Mobile ATV**

ELEVATION **859.31** ft.

DATE **12/20/93**

**GROUND SURFACE**

Top of casing at 2.3 ft. above ground level, bentonite-cement seal 0 to 9 ft.

11-in. dia. borehole 0 to 22 ft.

4-in.-ID Schedule 40 PVC blank casing +2.3 to 15.8 ft.

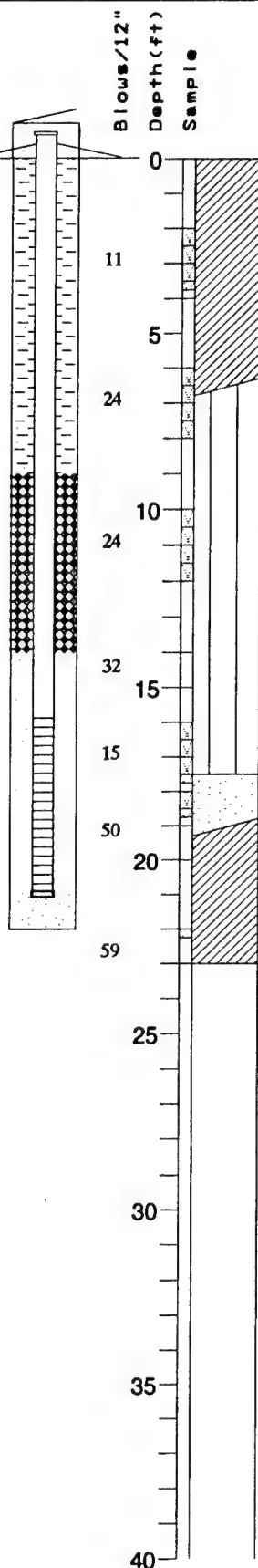
Bentonite pellet seal 9 to 14 ft.

Best Silica 620 sandpack 14 to 22 ft.

4-in.-ID slotted screen (0.01-in.) 15.8 to 20.9 ft.

Bottom well cap at 21.0 ft.

Slough 22 to 23 ft.



**LIGHT YELLOWISH BROWN SILTY CLAY (CL) 10YR6/4**

stiff, moist, fine to coarse gravel, <5% fine, 5% coarse, subrounded-subangular, medium plasticity slightly increasing gravel content at 3.0 ft. bgs

**LIGHT YELLOWISH BROWN CLAYEY SILT (ML) 10YR6/4**

very stiff, moist, fine to medium sand, <5% fine, <5% coarse, subangular; fine to coarse gravel, <5% fine, 10% coarse, subrounded-subangular, low to medium plasticity

no recovery

change in color to gray 2.5Y5/1

**LIGHT OLIVE BROWN SAND (SP-SM) 2.5Y5/4**

medium dense, saturated, fine to coarse sand, 20% fine, 40% medium, 30% coarse, subrounded-subangular; silt 10%

**GRAY SILTY CLAY WITH GRAVEL (CL) 10YR5/1**

hard, dry to moist, fine to coarse gravel, 5% fine, 10% coarse, subrounded-subangular; fine to medium sand <5%, low to medium plasticity

Boring terminated at 23 ft. bgs.

**Notes:**

1. PID readings for soil samples were not recorded.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 17.5 ft. bgs during drilling based on presence of water on sampler.
5. Boring EI004MW002 converted to monitoring well EI004MW002 on 12-20-93.
6. At 18.5 ft., 50 blows to 10 in.; at 22 ft., 59 blows to 10 in.

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Figure H28

Log of Boring and  
Well Completion Diagram for  
Well EI004MW002

TOP OF CASING

ELEVATION **861.16** ft.

EQUIPMENT **Summit CME 750 Mobile ATV**

ELEVATION **858.79** ft.

DATE **12/21/93**

**GROUND SURFACE**

Top of casing at 2.3 ft. above ground level, bentonite-cement seal 0 to 7.5 ft.

10-in. dia. borehole 0 to 24.5 ft.

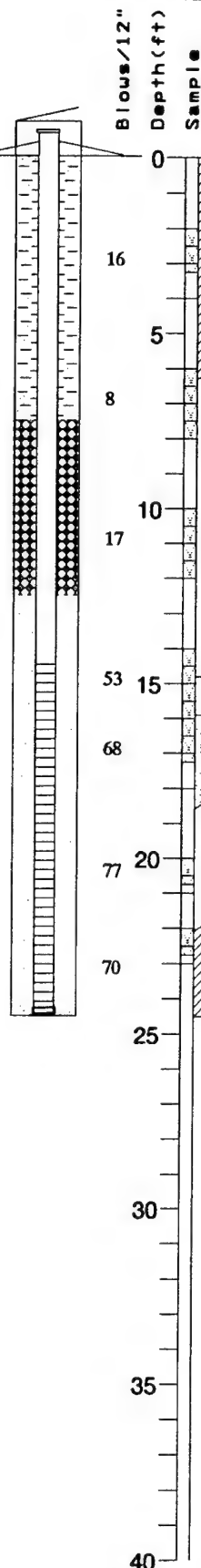
4-in.-ID Schedule 40 PVC blank casing +2.3 to 14.4 ft.

Bentonite pellet seal 7.5 to 12.5 ft.

Best Silica 620 sandpack 12.5 to 24.5 ft.

4-in.-ID slotted screen (0.01-in.) 14.4 to 24.4 ft.

Bottom well cap at 24.5 ft.



**DARK YELLOWISH BROWN SILTY CLAY (CL) 10YR4/4**

very stiff, moist, fine to coarse gravel, <5% fine, <5% coarse, subrounded-subangular, medium plasticity

**BROWN CLAYEY SILT (ML) 10YR5/3**

medium stiff, moist to wet, fine to medium sand, <5% fine, <5% medium, subrounded-subangular; fine to coarse gravel, <5% fine, 10% coarse, subrounded-subangular, medium plasticity

very stiff

change in color to dark gray 10YR5/2

**BROWN CLAYEY SILT WITH SAND (ML) 10YR5/3**

very hard, wet, fine to medium sand, 10% fine, 10% medium, subrounded-subangular; fine to coarse gravel, <5% fine, <5% coarse, subrounded-subangular, low plasticity

**BROWNISH YELLOW SILTY SAND (SM) 10YR6/6**

very dense, saturated, fine to coarse sand, 10% fine, 40% medium, 25% coarse, subrounded-angular; fine to coarse gravel, 5% fine, <5% coarse; silt 15%

**BROWN SANDY SILT (ML) 10YR5/3**

hard, wet, fine to medium sand, 20% fine, 10% medium, subrounded-subangular; clay <10%, low plasticity

**GRAY SILTY CLAY WITH GRAVEL (CL) 10YR5/1**

hard, dry to moist, fine to coarse gravel, 5% fine, 15% coarse, subrounded-subangular; fine to medium sand <5%, low to medium plasticity

Boring terminated at 24.5 ft. bgs.

**Notes:**

1. PID readings for soil samples were not recorded.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at 15.5 ft. bgs during drilling based on presence of water on sampler.
5. Boring EI004MW003 converted to monitoring well EI004MW003 on 12-21-93.
6. At 16.5 ft., 68 blows to 11 in.; at 20 ft., 77 blows to 9 in.; at 22 ft., 70 blows to 11 in.

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Figure H29

Log of Boring and  
Well Completion Diagram for  
Well EI004MW003

TOP OF CASING

ELEVATION 858.58 ft.

EQUIPMENT Summit CME 750 Mobile ATV

ELEVATION 858.79 ft. DATE 12/22/93

**GROUND SURFACE**

Top of casing at 0.2 ft. below ground level, bentonite-cement seal 0 to 8 ft.

11-in. dia. borehole 0 to 21.25 ft.

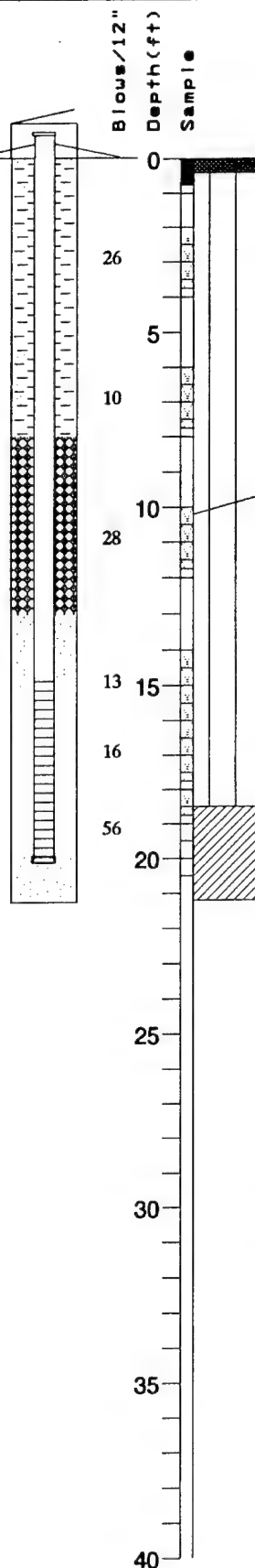
4-in.-ID Schedule 40 PVC blank casing 0.2 to 14.8 ft.

Bentonite pellet seal 8 to 13 ft.

Best Silica 620 sandpack 13 to 21.25 ft.

4-in.-ID slotted screen (0.012-in.) 14.8 to 19.9 ft.

Bottom well cap at 20 ft.



**ASPHALTIC CONCRETE 4-INCHES**

**LIGHT OLIVE BROWN CLAYEY SILT WITH GRAVEL (ML) 2.5Y5/4**

very stiff, moist, fine to coarse gravel, 10% fine, 10% coarse, subrounded-subangular; medium to coarse sand <5%, low plasticity

stiff, moist to wet, low to medium plasticity

**LIGHT OLIVE BROWN CLAYEY SILT (ML) 2.5Y5/4**

very stiff, moist to wet, fine to coarse gravel, 5% fine, 5% coarse, subrounded-subangular, low to medium plasticity

change in color to very dark gray 10YR3/1, stiff

change in color to olive brown 2.5Y4/4, wet to saturated, fine to coarse sand <5%, subrounded-subangular, interbedded sand lenses at 16 ft., 16.5 ft. and 18 ft., no gravel

**OLIVE BROWN SILTY CLAY WITH GRAVEL (CL) 2.5Y4/4**

hard, dry to moist, fine to coarse gravel, 5% fine, 10% coarse, subrounded-angular; fine to medium sand <5%, low to medium plasticity

Boring terminated at 21.25 ft. bgs.

**Notes:**

- 1.PID readings for soil samples were not recorded.
- 2.Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
- 3.Munsell color chart used to characterize soil color.
- 4.Groundwater encountered at 16 ft. bgs during drilling based on presence of water on sampler.
- 5.Boring EI004MW004 converted to monitoring well EI004MW004 on 12-22-93.
- 6.At 18.5 ft., 56 blows to 8 in.

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Figure H30

Log of Boring and  
Well Completion Diagram for  
Well EI004MW004



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

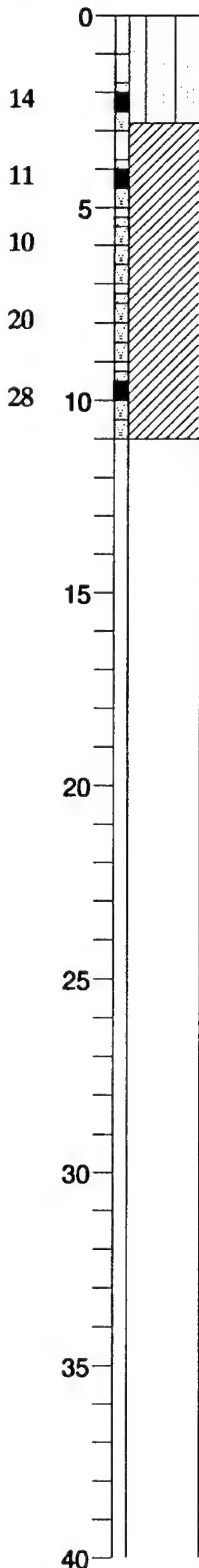
Summit CME 75-B

ELEVATION

863.6 ft.

DATE

1/3/94



**OLIVE BROWN SILTY SAND WITH GRAVEL (SM) 2.5Y4/3**

medium dense, moist, fine to coarse sand, 30% fine, 40% medium to coarse, subrounded-subangular; fine to coarse gravel, 5% fine, 10% coarse, subangular-angular; silt 15%

**OLIVE BROWN SILTY CLAY (CL) 2.5Y4/3**

stiff, moist, medium to high plasticity  
change in color to light olive brown 2.5Y5/6, fine to coarse sand 5%, subrounded-subangular, medium to high plasticity  
change in color to olive gray 5Y4/2 at 5 ft. bgs.  
▽ change in color to light olive brown 2.5Y5/13 at 7 ft. bgs., increasing sand content, gravel 5%, subrounded-subangular  
1-inch thick silty sand lens at 10.75 ft. bgs, fine to medium sand, moist to wet

Boring terminated at 11.0 ft. bgs.

Notes:

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 10.75 ft. bgs during drilling based on a 1-inch thick moist to wet sand lens that was encountered at that depth.
5. Boring backfilled with cement-bentonite grout on 1-3-94.

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Figure H31

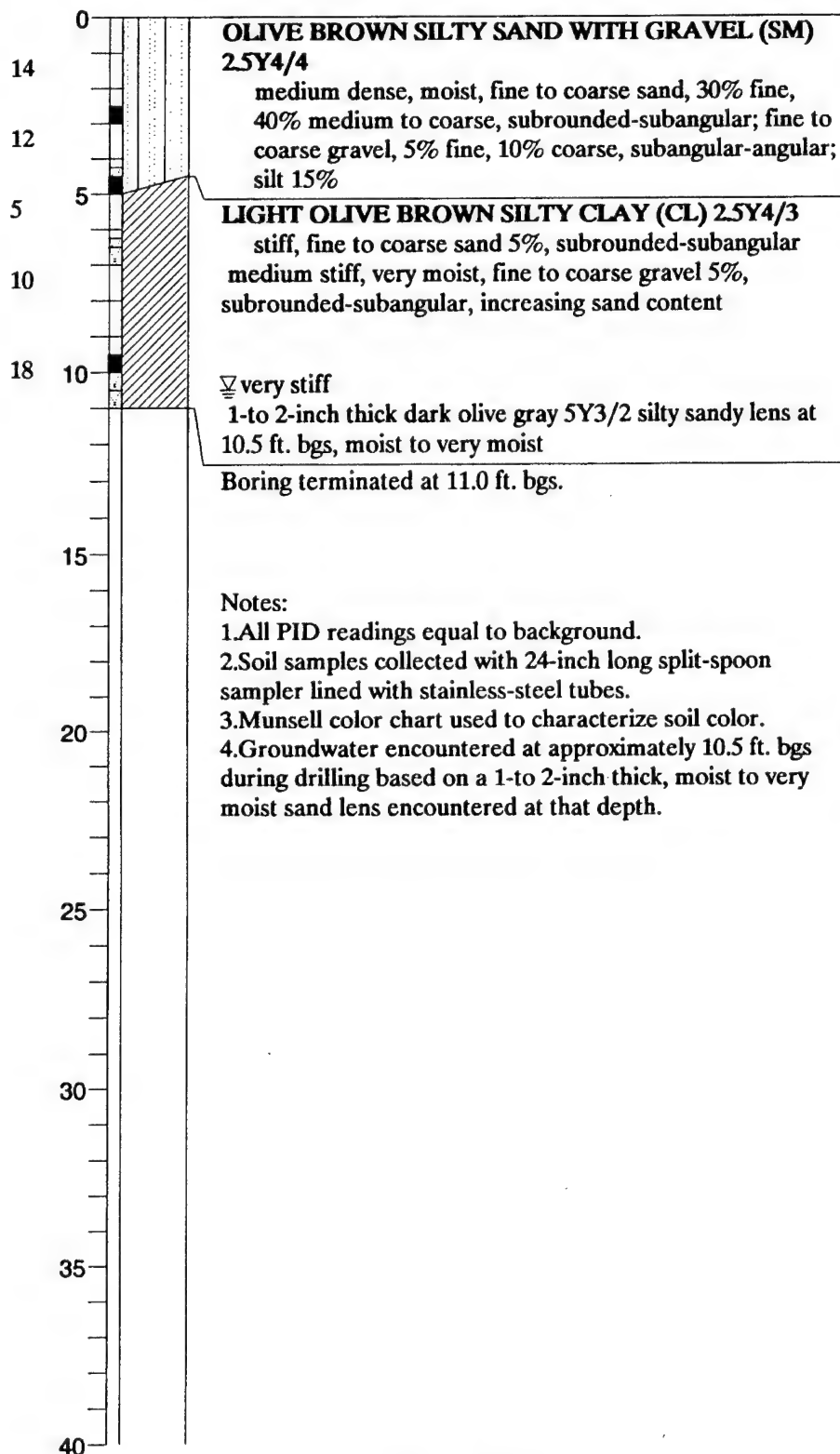
Log of Boring EI005SB001



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 863.6 ft. DATE 1/3/94



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Figure H32

Log of Boring EI005SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 863.6 ft. DATE 1/4/94

0  
5  
9  
10  
19  
17  
10  
15  
20  
25  
30  
35  
40

**OLIVE GRAY SILTY CLAY (CL) 5Y4/2**

medium stiff, moist, fine to medium sand 5%,  
subrounded-subangular; gravel 5%,  
subrounded-subangular, medium to high plasticity

stiff

black staining from 6 to 7 ft. bgs

change in color to light olive brown 2.5Y5/4, stiff, very  
moist, increasing sand and gravel content

1/2-inch thick sand lens at approximately 9.5 ft. bgs, very  
moist

Boring terminated at 11.0 ft. bgs.

Notes:

1. PID readings equal to background except 45 ppm at 6.5 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 9.5 ft. bgs during drilling based on the very moist sand lens encountered at this depth and water that flowed into the borehole when drilling from 9.5 to 11.0 ft. bgs.
5. Boring backfilled with cement-bentonite grout on 1-4-94.

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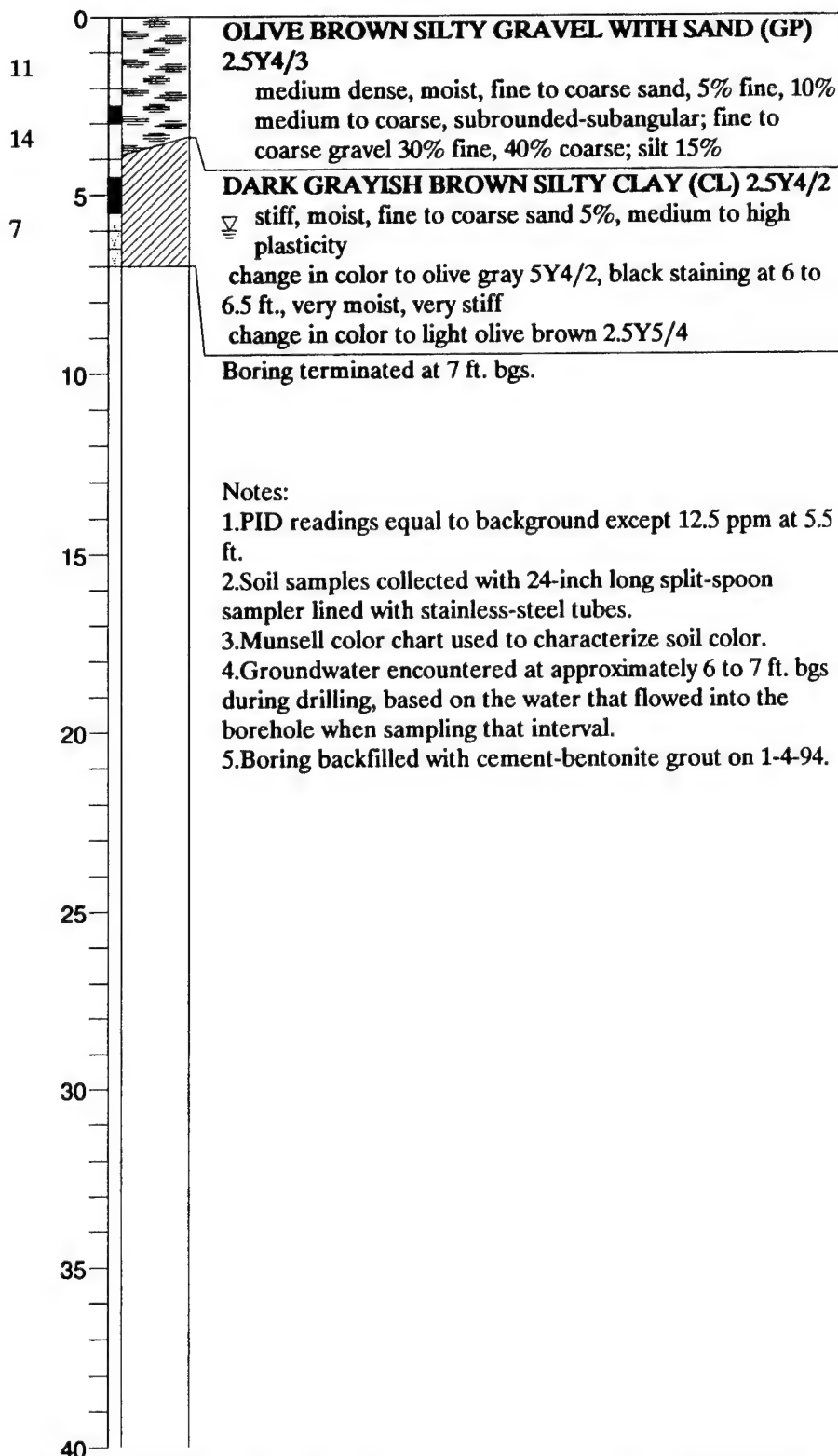
Figure H33

Log of Boring EI005SB003

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 863.6 ft. DATE 1/4/94



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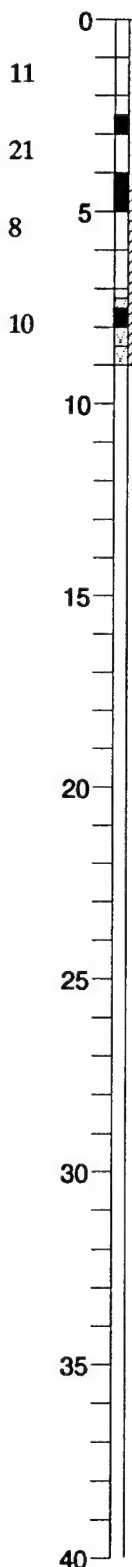
Figure H34

Log of Boring EI005SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 863.6 ft. DATE 1/4/94



**OLIVE BROWN SILTY SAND WITH GRAVEL (SP) 2.5Y4/3**

medium dense, moist, fine to coarse sand, 30% fine, 40% medium to coarse, subrounded-subangular; fine to coarse gravel 5% fine, 10% coarse; silt 15%

**OLIVE GRAY SILTY CLAY (CL) 5Y4/2**

very stiff, moist, fine to coarse sand 5%, subrounded-subangular, medium to high plasticity  
change in color to light olive brown 2.5Y5/3, stiff, moist to very moist, fine to coarse sand, 5% fine, 5% medium to coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular

Boring terminated at 9 ft. bgs.

Notes:

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 8.5 ft. bgs during drilling based on very moist soil encountered at that depth.
5. Boring backfilled with cement-bentonite grout on 1-4-94.

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Figure H35

Log of Boring EI005SB005

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 863.9 ft. DATE 12/20/93

0  
BLACK CLAY (CL) [FILL] 10YR2/1  
moist, some sand and gravel, low plasticity  
COAL FRAGMENTS [FILL]  
BLACK CLAY (CL) [FILL] 10YR2/1  
moist, some sand and gravel, low plasticity  
5  
Boring terminated at 2.5 ft. bgs.

Notes:

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite chips on 12-20-93.

10

15

20

25

30

35

40

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Figure H36

Log of Boring EI006SB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 863.7 ft. DATE 12/21/93

0

**DARK GRAYISH BROWN CLAY [FILL] (CH)**

moist, rootlets

**RED SAND (SP) [FILL] 10YR4/6**

fine to coarse sand

**GRAVEL (GM-GC)**

moist

5

Boring terminated at 3 ft. bgs.

10

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with a 2-foot long split-barrel sampler lined with stainless-steel tubes. A drill rig was used to sample at this location because the hand auger could not fully auger through the highly compacted soil.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite chips on 12-21-93.

15

20

25

30

35

40

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Figure H37

Log of Boring EI006SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 863.6 ft.

DATE 12/20/93

0

**BROWN CLAY (CH)**

moist, rootlets  
sand < 20% at 1 ft. bgs

Boring terminated at 3 ft. bgs.

5

10

15

20

25

30

35

40

Notes:

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite chips on 12-20-93.

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Figure H38

Log of Boring EI006SB003

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 864.0 ft. DATE 12/21/93

0

**DARK YELLOWISH BROWN CLAY [FILL] (CH)**  
**10YR4/6**  
moist

5

**YELLOWISH BROWN CLAY (CL) [FILL] 10YR5/6**  
with dark grayish brown 10YR3/2 mottling, moist,  
coarse sand, gravel and coal fragments

10

**WHITE GRAVEL (GM-GC) 10YR8/1**  
moist, angular

15

Boring terminated at 3 ft. bgs.

20

Notes:

- 1.All PID readings equal to background.
- 2.Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
- 3.Munsell color chart used to characterize soil color.
- 4.Groundwater not encountered during drilling.
- 5.Boring backfilled with bentonite chips on 12-21-93.

25

30

35

40

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Figure H39

Log of Boring EI006SB004



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 864.2 ft. DATE 12/21/93

0  
DARK GRAYISH BROWN CLAY (CH) [FILL] 10YR4/2

BROWN SAND (SP) [FILL] 10YR4/3  
moist, fine to coarse sand  
3-inch thick dark grayish brown clay at 1.6 ft. bgs.

LIGHT GRAY GRAVEL (GM-GC) 10YR7/1  
moist, fine gravel, angular, 1/4 to 3/4-inches in diameter; coarse sand

Boring terminated at 3 ft. bgs.

Notes:

- 1.All PID readings equal to background.
- 2.Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
- 3.Munsell color chart used to characterize soil color.
- 4.Groundwater not encountered during drilling.
- 5.Boring backfilled with bentonite chips on 12-21-93.

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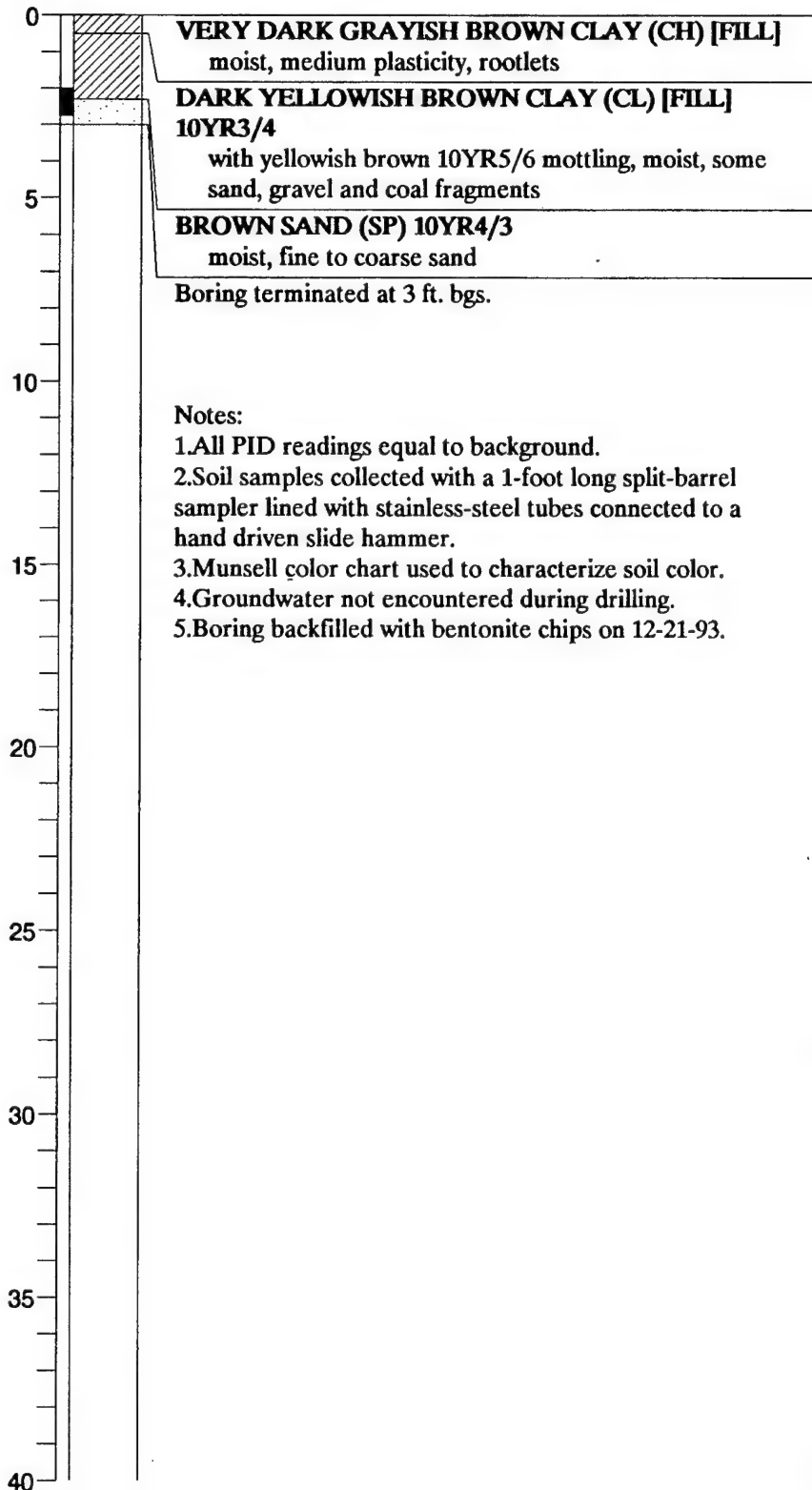
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Figure H40

Log of Boring EI006SB005

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer  
ELEVATION 863.9 ft. DATE 12/21/93



Notes:

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite chips on 12-21-93.

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Figure H41

Log of Boring EI006SB006

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 863.9 ft. DATE 12/21/93

0  
VERY DARK GRAYISH BROWN CLAY (CH) [FILL]  
moist, medium plasticity, rootlets  
DARK YELLOWISH BROWN CLAY (CL) [FILL]  
10YR3/4  
with yellowish brown 10YR5/6 mottling, moist, some  
sand, gravel and coal fragments  
5  
LIGHT GRAY GRAVEL (GM-GC) 10YR7/1  
moist, fine gravel, angular; coarse sand  
BROWN SAND (SP) 10YR4/3  
moist, fine to coarse sand  
10  
Boring terminated at 3 ft. bgs.

Notes:

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite on 12-21-93.
6. This boring was augered adjacent to Boring EI006SB006 to collect a matrix spike (MS) sample for the laboratory.

40

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Figure H42

Log of Boring EI006SB6MS

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 863.9 ft. DATE 12/21/93

0

**VERY DARK GRAY BROWN CLAY (CL) [FILL] 10YR3/1**

moist, low plasticity

1

**LIGHT GRAY GRAVEL (GM-GC) [FILL] 10YR7/1**

moist, fine gravel, angular, coarse sand

5

**DARK GRAYISH BROWN CLAY (CL) [FILL] 2.5Y4/2**

moist, gravel 20%, coal fragments <5%

Boring terminated at 3 ft. bgs.

10

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite chips on 12-21-93.

15

20

25

30

35

40

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Figure H43

Log of Boring EI006SB007

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 864.5 ft. DATE 12/21/93

0  
5  
10  
15  
20  
25  
30  
35  
40

**VERY DARK GRAYISH BROWN CLAY (CH) [FILL]  
10YR3/2**

moist, gravel <5%, coal and cinder fragments  
increasing gravel content 20%, at 1.5 ft.

Boring terminated at 3 ft. bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during drilling.
5. Boring backfilled with bentonite chips on 12-21-93.

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Figure H44

Log of Boring EI006SB008

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 863.5 ft. DATE 12/21/93

0

**BLACK GRAVEL (GW-GP) [FILL] 10YR2/1**

**VERY DARK GRAYISH BROWN CLAY (CH)**  
**10YR3/2**

moist, gravel <5%, coal fragments

**VERY DARK GRAY CLAY (CL) 10YR3/1**

moist, low plasticity

5

Boring terminated at 3 ft. bgs.

10

Notes:

1. All PID readings equal to background.

2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.

3. Munsell color chart used to characterize soil color.

4. Groundwater not encountered during drilling.

5. Boring backfilled with bentonite chips on 12-21-93.

15

20

25

30

35

40

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Figure H45

Log of Boring EI006SB009

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 863.5 ft. DATE 12/21/93

0

**BLACK GRAVEL (GW-GP)**

**BROWN CLAY (CL) 7.5YR5/4**

≡ moist, gravel 20%, angular  
coal fragments 5%

Boring terminated at 3 ft. bgs.

5

10

15

20

25

30

35

40

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with a 1-foot long split-barrel sampler lined with stainless-steel tubes connected to a hand driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at 2 ft. bgs during hand augering based on the wet sampler.
5. Boring backfilled with bentonite chips on 12-21-93.

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Figure H46

Log of Boring EI006SB010

Blogs/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 850.5 ft. DATE 11/30/93

0

**BLACK SANDY CLAY (CL) 17.5YR2.5/1**

moist, low plasticity, fine to medium sand 15-20%

**YELLOWISH BROWN CLAY (CH) 10YR5/4**

moist, high plasticity, fine to medium sand 15%



5

Boring terminated 5.0 ft. bgs.

10

15

20

25

30

35

40

**Notes:**

1. All PID readings equal 3.5 ppm.
2. Soil samples collected with a split-barrel sampler connected to a hand-driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater encountered at approximately 4 ft. during hand augering.
5. Boring backfilled with bentonite chips on 11-30-93.

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Figure H47

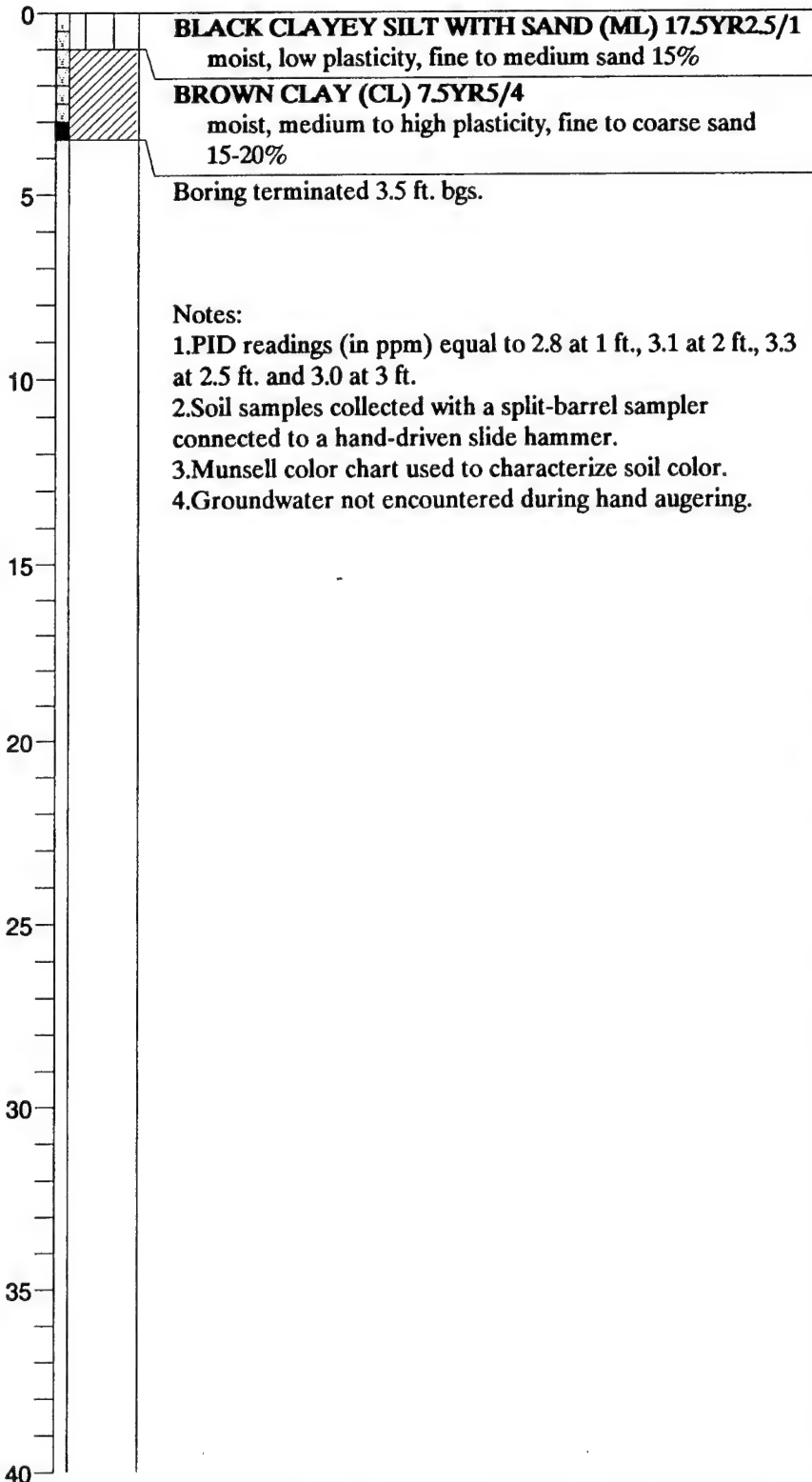
Log of Boring SM020SB001



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 850.0 ft. DATE 12/1/93



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Marion County, Indiana

Figure H48

Log of Boring SM020SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 854.1 ft. DATE 12/1/93

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

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27

28

29

30

31

32

33

34

35

36

37

38

39

40

**BLACK CLAYEY SILT WITH SAND (CL-ML)**

**7.5YR2.5/1**

moist, low plasticity, fine to medium sand 15-20%

**BROWN CLAY WITH SAND (CL)**

moist, medium to high plasticity, fine to coarse sand  
15-20%

Boring terminated 3.5 ft. bgs.

**Notes:**

1. PID readings (in ppm) equal to 3.1 at 0.5 ft. and 4.7 at 2 ft.
2. Soil samples collected with a split-barrel sampler connected to a hand-driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 12-1-93.

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Figure H49

Log of Boring SM020SB003

Blogs/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger/ Slide Hammer

ELEVATION 854.2 ft. DATE 12/20/93

0

**BLACK CLAY (CH) 10YR2/1**

moist

**YELLOWISH BROWN CLAY (CH) 10YR5/4**

moist, high plasticity

5

Boring terminated 4 ft. bgs.

10

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with a split-barrel sampler connected to a hand-driven slide hammer.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 12-20-93.

15

20

25

30

35

40

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Figure H50

Log of Boring SM020SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 767.5 ft. DATE 1/6/94

0

**BROWN SANDY CLAY (CL) 10YR4/3**

moist, fine sand 35%

1

**DARK GRAYISH BROWN SILTY CLAY WITH SAND (CL) 2.5Y8/2**

moist, fine to coarse sand 15%

5

**BROWN SANDY CLAY (CL) 7.5YR3/2**

moist, fine to medium sand 30%

Increasing sand content 40% from 2.5 to 3.0 ft. bgs.

Boring terminated at 3.0 ft. bgs.

10

**Notes:**

1. PID readings (in ppm) equal to 0.5 at 0.5 ft. and 0.3 at 2.5 ft.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with cement-bentonite grout on 1-7-94.

15

20

25

30

35

40

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Figure H51

Log of Boring SM022SB001

Blogs/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 768.0 ft. DATE 1/6/94

0

**BROWN SANDY CLAY (CL) 10YR4/3**

moist, fine sand 40%

Color change in color to brown 7.5YR4/2 at 2.0 ft. bgs

Color change in color to dark brown 10YR3/3 at 2.5 ft. bgs

Boring terminated at 3.0 ft. bgs.

5

10

15

20

25

30

35

40

Notes:

1. PID readings (in ppm) equal to 0.9 at 0.5 ft. and 0.9 at 2.5 ft.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with cement-bentonite grout on 1-7-94.

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Figure H52

Log of Boring SM022SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger  
ELEVATION 765.0 ft. DATE 1/6/94

0

5

10

15

20

25

30

35

40

**VERY DARK GRAYISH BROWN SANDY CLAY (CL)  
10YR3/2**

moist, fine to medium sand 35%

Color change to brown 10YR4/3 at 1.0 ft. bgs

Fine gravel 5%, subrounded at 2.0 ft. bgs

Boring terminated at 3.0 ft. bgs.

**Notes:**

1. PID readings (in ppm) equal to 1.1 at 0.5 ft. and 0.9 at 2.5 ft.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with cement-bentonite grout on 1-7-94.

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Figure H53

Log of Boring SM022SB003

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

Hand Auger

ELEVATION

765.0 ft.

DATE

1/6/94

0

**VERY DARK GRAYISH BROWN SANDY CLAY (CL)  
10YR3/2**

moist, fine to coarse sand 35%, fine gravel 10%,  
subrounded

Color change to brown 10YR4/3 at 2.0 ft. bgs

Boring terminated at 3.0 ft. bgs.

5

10

15

20

25

30

35

40

**Notes:**

1. PID readings (in ppm) equal to 0.9 at 0.5 ft. and 1.1 at 2.5 ft.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with cement-bentonite grout on 1-7-94.

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Figure H54

Log of Boring SM022SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 764.0 ft. DATE 1/6/94

0

1

2

3

4

5

5

10

15

20

25

30

35

40

**DARK GRAYISH BROWN SANDY CLAY (CL)**  
**10YR4/2**

moist, fine to coarse sand 35%, fine gravel 5%,  
subrounded

Color change to very dark grayish brown 10YR3/2,  
increasing gravel content 10%

Boring terminated at 3.0 ft. bgs.

**Notes:**

1. PID readings (in ppm ) equal to 1.0 at 0.5 ft. and 1.2 at 2.5 ft.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with cement-bentonite grout on 1-7-94.

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Figure H55

Log of Boring SM022SB005



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 769.0 ft. DATE 12/9/93

0  
5  
10  
15  
20  
25  
30  
35  
40

**VERY DARK GRAY SANDY CLAY WITH SAND (CL)**  
**2.5Y3/1**

moist, fine to coarse sand, 5% medium, 5% coarse; fine gravel 5%, subangular, rootlets

**VERY DARK GRAYISH BROWN SILTY CLAY WITH SAND (CL) 10YR3/2**

moist, fine to medium sand, 10% fine, 10% medium, rootlets

**DARK GRAYISH BROWN SAND CLAY (CL)**  
**10YR4/2**

very moist, fine to coarse sand, 10% fine, 15% medium, 10% coarse; fine to coarse gravel, 5% fine, 5% coarse, subrounded-subangular

Color change to light olive brown, increasing sand content, fine to coarse sand, 15% fine, 20% medium, 10% coarse at 2.5 ft. bgs

Boring terminated at 3.0 ft. bgs.

Notes:

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 12-9-93

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Figure H56

Log of Boring SM023SB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 762.0 ft. DATE 12/9/93

0

**BROWN SANDY CLAY (CL) 10YR4/3**  
very moist, fine to coarse sand, 15% fine, 15% medium,  
5% coarse; fine gravel 10%  
Slightly decreasing sand content at 1.0 ft. bgs

5

**BROWN CLAY WITH SAND (CL) 10YR4/3**  
very moist, fine to coarse sand, 15% fine, 5% medium,  
<5% coarse; fine gravel 5%, subangular  
Increasing fine gravel content 10% at 2.0 ft. bgs

10

**SANDY CLAY WITH GRAVEL (CL) 10YR4/3**  
wet, fine to coarse sand, 10% fine, 15% medium, 10%  
coarse; fine to coarse gravel, 10% fine, 10% coarse,  
subrounded-subangular

Boring terminated at 3.0 ft. bgs.

15

Notes:

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 12-9-93.

20

25

30

35

40

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Figure H57

Log of Boring SM023SB002

Blogs/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 768.0 ft. DATE 12/9/93

0  
5  
10  
15  
20  
25  
30  
35  
40

**BROWN SAND WITH SILT (SP-SM) 10YR4/3**

very moist to wet, fine to coarse sand, 35% fine, 35% medium, 15% coarse, subrounded-subangular; fine gravel 5%, subrounded-subangular, fines 10%;

**BROWN SILTY SAND (SM) 10YR4/3**

wet, fine to coarse sand, 40% fine, 30% medium, <5% coarse; fine gravel 5%, subrounded-subangular

**BROWN CLAYEY SAND (SC) 10YR5/3**

wet to saturated, fine to coarse sand, 40% fine, 20% medium, <5% coarse; fine gravel 5%, subrounded-subangular

Boring terminated at 3.0 ft. bgs.

Notes:

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 12-9-93.

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Figure H58

Log of Boring SM023SB003

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 769.0 ft. DATE 12/9/93

0

**BROWN CLAYEY SAND (SC) 10YR4/3**

moist, fine to coarse sand, 35% fine, 25% medium, 5% coarse; fine gravel 5%, subangular, bullet fragments

5

**BROWN SILTY SAND (SM) 10YR4/3**

moist, fine to coarse sand, 45% fine, 15% medium, 5% coarse; fine gravel <5%, subangular

Slightly increasing gravel content 5%,

subrounded-subangular at 2.0 ft. bgs

Decreasing gravel content <5% at 2.75 ft. bgs

10

Boring terminated at 3.0 ft. bgs.

15

**Notes:**

1. PID readings equal to background.

2. Soil samples collected with a hand auger.

3. Munsell color chart used to characterize soil color.

4. Groundwater not encountered during hand augering.

5. Boring backfilled with bentonite chips on 12-9-93.

20

25

30

35

40

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Figure H59

Log of Boring SM023SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

Hand Auger

ELEVATION

780.0 ft.

DATE

12/9/93

0

**VERY DARK GRAYISH BROWN SILTY CLAY WITH SAND (CL) 10YR3/2**

moist, fine to medium sand, 15% fine, <5% medium

5

**DARK GRAYISH BROWN CLAY WITH SAND (CL)**

moist, fine to medium sand, 15% fine, 5% medium, bullet fragments

Fine gravel <5%, angular to subangular, decreasing sand content

Color change to dark gray 10YR4/1 at 2.5 ft. bgs

Fine sand <5%

10

Boring terminated at 3.0 ft. bgs.

15

Notes:

1. PID readings equal to background.

2. Soil samples collected with a hand auger.

3. Munsell color chart used to characterize soil color.

4. Groundwater not encountered during hand augering.

5. Boring backfilled with bentonite chips on 12-9-93.

20

25

30

35

40

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Figure H60

Log of Boring SM023SB005

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 745.0 ft. DATE 2/19/94

0

5

10

15

20

25

30

35

40

**DARK BROWN SILTY CLAY WITH SAND (CL)  
7.5YR3/2**

wet, fine to medium sand, 10% fine, 10% medium,  
subrounded-angular, plastic, some rootlets and leaves,  
organic odor

Very moist, no leaves or organic odor at 0.5 ft.

Boring terminated at 3.0 ft. bgs.

**Notes:**

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 2-22-94.
6. A supplemental boring was hand augered on 4-6-94 to recollect samples from 0.5 to 2.5 ft. bgs for shot/bullet content analysis. This boring was backfilled with bentonite chips on 4-6-94.

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Figure H61

Log of Boring SM024SB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 746.1 ft. DATE 2/19/94

0  
5  
10  
15  
20  
25  
30  
35  
40

**DARK GRAYISH BROWN SILTY CLAY WITH SAND (CL) 10YR4/2**

moist, fine to medium sand, 15% fine, 5% medium, subrounded, plastic, organic odor  
Subrounded-subangular sand grains, rootlets, no organic odor at 0.5 ft.

Boring terminated at 3.0 ft. bgs.

**Notes:**

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 2-19-94.
6. A supplemental boring was hand augered on 4-6-94 to recollect samples from 0.5 to 2.5 ft. bgs for shot/bullet content analysis. This boring was backfilled with bentonite chips on 4-6-94.

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Figure H62

Log of Boring SM024SB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 746.6 ft. DATE 2/19/94

0

5

10

15

20

25

30

35

40

**VERY DARK GRAYISH BROWN SILTY CLAY WITH SAND (CL) 10YR3/2**

moist, fine sand 15%, subrounded-angular, low plasticity, organic odor, rootlets

No rootlets or organic odor at 0.5 ft.

Boring terminated at 1.25 ft. bgs. Auger refusal due to frozen soil or rock(s). Three attempts were made.

**Notes:**

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 2-19-94.
6. A supplemental boring was hand augered on 4-6-94 to recollect samples from 0.5 to 2.5 ft. bgs for shot/bullet content analysis. This boring was backfilled with bentonite chips on 4-6-94.

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Figure H63

Log of Boring SM024SB003



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

Hand Auger

ELEVATION

746.9 ft.

DATE

2/19/94

0

**VERY DARK GRAY SILTY CLAY WITH SAND (CL)  
10YR3/1**

moist, fine to coarse sand, 10% fine, 5% medium, 5% coarse, subrounded-angular; fine gravel <5%, plastic, rootlets (upper 0.5 ft.)

5

Boring terminated at 2.5 ft. bgs. Auger refusal due to frozen soil or rock(s). Three attempts were made.

10

**Notes:**

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 2-19-94.
6. A supplemental boring was hand augered on 4-6-94 to recollect samples from 0.5 to 2.5 ft. bgs for shot/bullet content analysis. This boring was backfilled with bentonite chips on 4-6-94.

15

20

25

30

35

40

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Figure H64

Log of Boring SM024SB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 753.8 ft. DATE 2/19/94

0

1

2

3

4

5

6

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8

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11

12

13

14

15

16

17

18

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21

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**DARK BROWN SILTY CLAY WITH SAND (CL)  
10YR3/3**

wet, fine to coarse sand, 10% fine, 5% medium, 5% coarse, rounded-angular, plastic, organic odor, some rootlets

Moist, fine gravel 15%, subrounded-subangular at 0.5 ft.

Boring terminated at 3.0 ft. bgs.

**Notes:**

1. PID readings equal to background.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 2-19-94.
6. A supplemental boring was hand augered on 4-6-94 to recollect samples from 0.5 to 2.5 ft. bgs for shot/bullet content analysis. This boring was backfilled with bentonite chips on 4-6-94.

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Figure H65

Log of Boring SM024SB005

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Hand Auger

ELEVATION 750.0 ft. DATE 4/8/94

**VERY DARK GRAYISH BROWN SILTY CLAY WITH SAND (CL) 10YR3/2**

moist, fine to medium sand, 10% fine, 5% medium, subrounded-angular, plastic, organic odor, some rootlets (upper 0.5 ft.)

Boring terminated at 3.0 ft. bgs.

Notes:

1. PID readings not recorded.
2. Soil samples collected with a hand auger.
3. Munsell color chart used to characterize soil color.
4. Groundwater not encountered during hand augering.
5. Boring backfilled with bentonite chips on 4-6-94.
6. Boring no. SM024SB007 replaces SM024SB006, which was collected in an incorrect location. The log for SM024SB006 is not presented.

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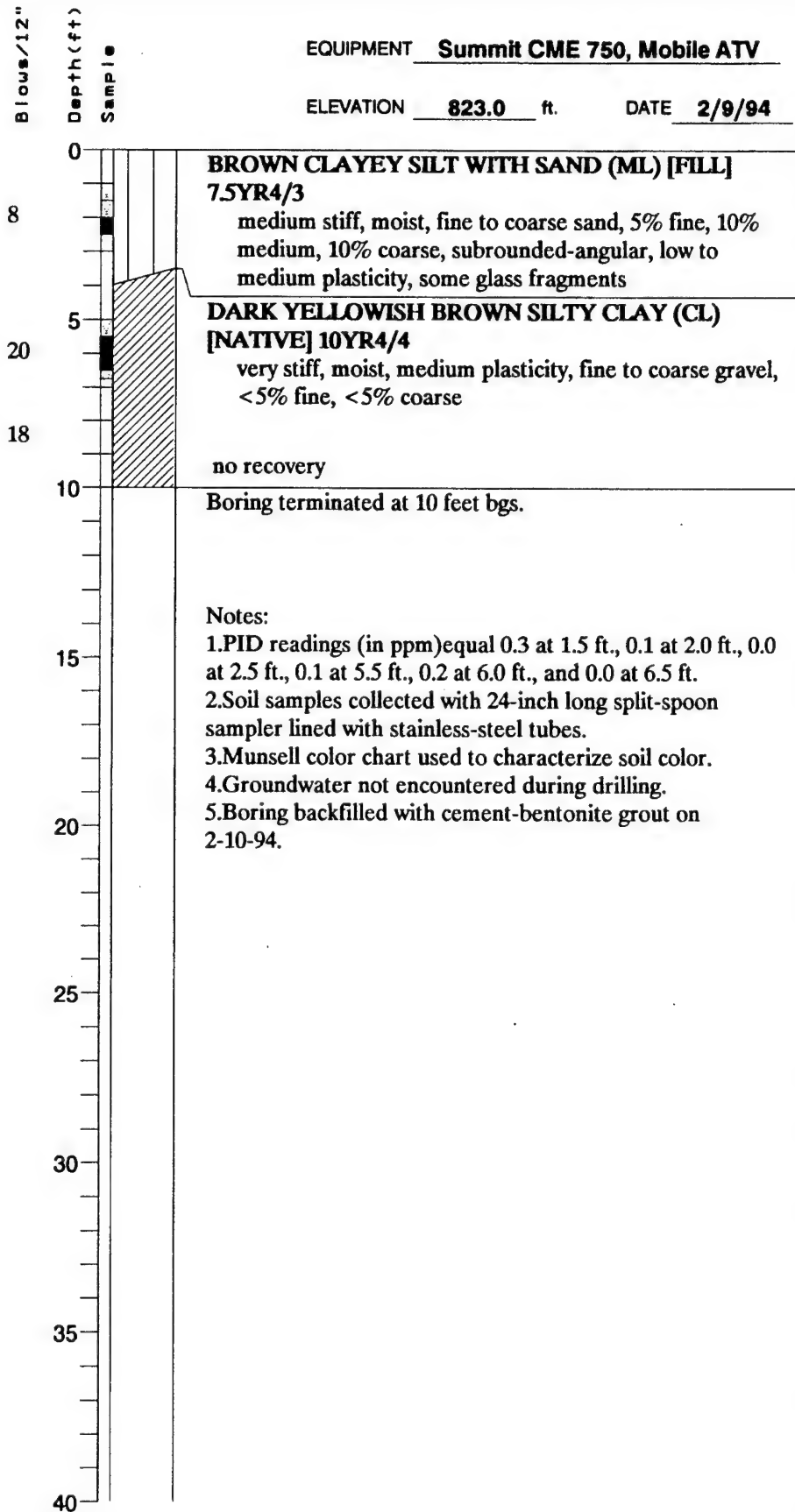
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Figure H66

Log of Boring SM024SB007

EQUIPMENT Summit CME 750, Mobile ATV

ELEVATION 823.0 ft. DATE 2/9/94



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Figure H67

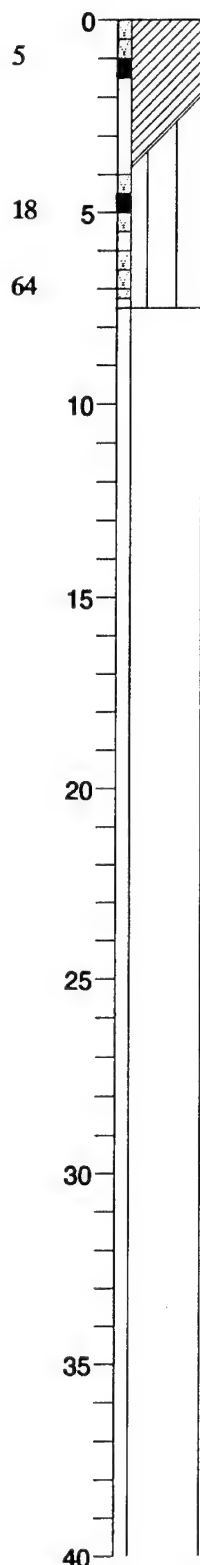
Log of Boring SM25cSB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750 Mobile ATV

ELEVATION 806.5 ft.

DATE 2/7/94



**VERY DARK GRAY SILTY CLAY (CL) [FILL]  
10YR3/1**

medium stiff, moist to wet, medium plasticity, some  
wood chips, slag and coal, rootlets

**DARK GRAYISH BROWN CLAYEY SILT WITH  
GRAVEL (ML) [NATIVE] 10YR4/2**

very stiff, dry, low plasticity, fine to coarse gravel, 10%  
fine, 10% coarse

Boring terminated at 7.5 feet bgs.

**Notes:**

1. PID readings (in ppm) equal 0.4 at 0.5 ft., 0.3 at 1.0 ft., 0.1 at 4.5 ft., 0.1 at 5 ft., 0.3 at 6.5 ft., and 0.1 at 7.0 ft.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
4. Native soil encountered approximately 2.5 to 3.5 ft. bgs.
5. Groundwater not encountered during drilling. Upper 2 ft. was saturated with surface runoff water.
6. Boring backfilled with cement-bentonite grout on 2-7-94.
7. At 6.5 ft., 64 blows to 9 in.

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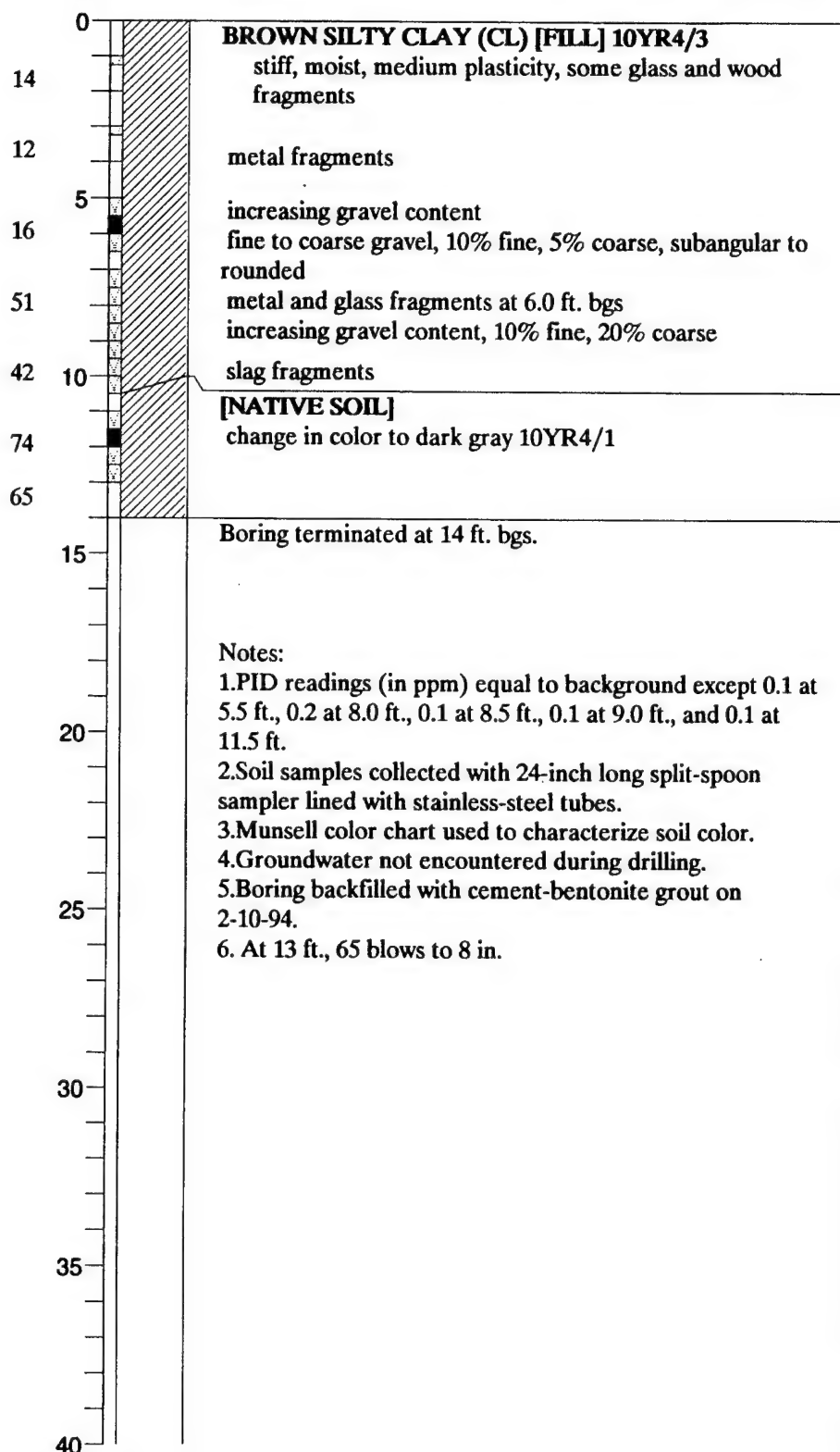
Figure H68

Log of Boring SM25cSB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750, Mobile ATV

ELEVATION 816.7 ft. DATE 2/8/94



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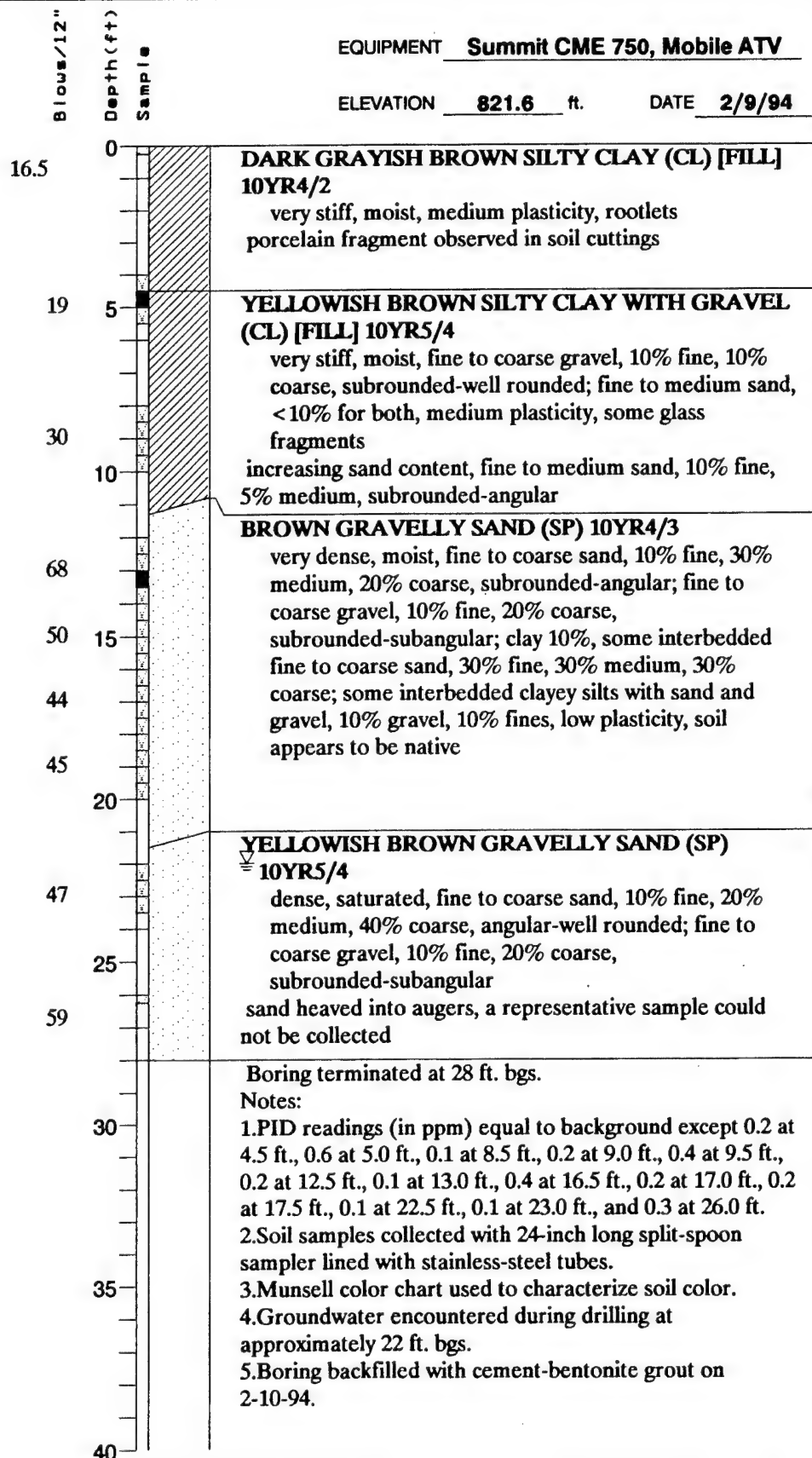


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Figure H69

Log of Boring SM25cSB003



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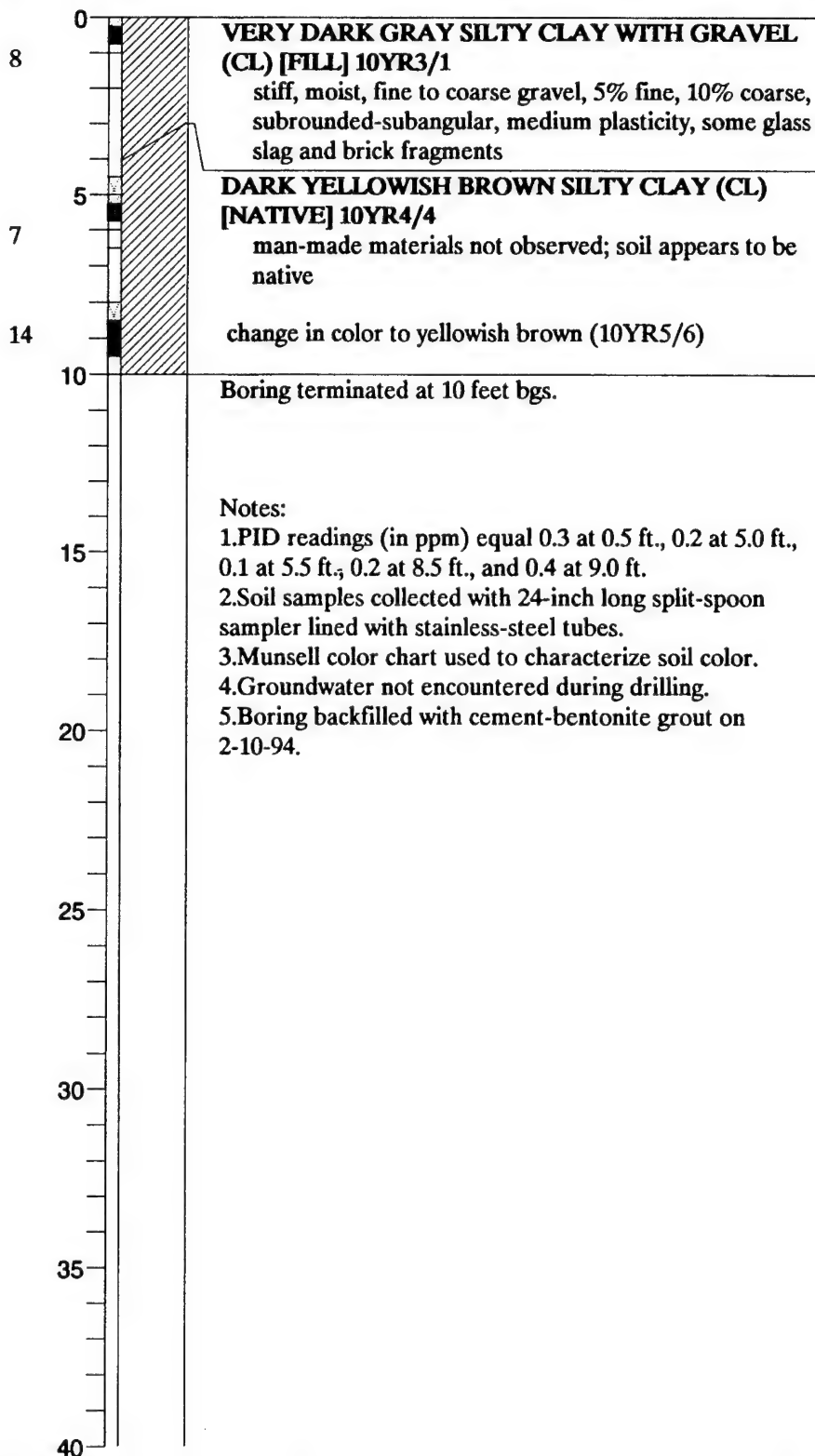
Figure H70

Log of Boring SM25cSB004

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 750, Mobile ATV

ELEVATION 822.5 ft. DATE 2/9/94



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Figure H71

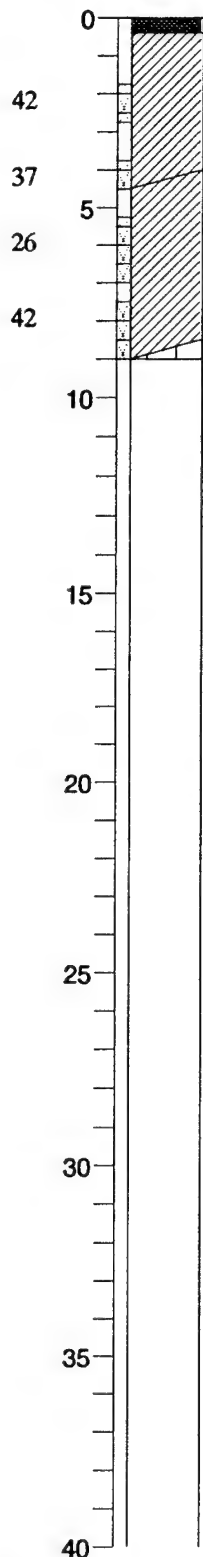
Log of Boring SM25cSB005



Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 856.4 ft. DATE 1/24/94



**ASPHALTIC CONCRETE**

pieces of plastic encountered in soil cuttings to 1.0 ft.

**DARK GRAYISH BROWN SILTY CLAY (CL) [FILL] 2.5Y4/2**

hard, fine to coarse sand, 5% fine, 5% coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular, medium to high plasticity, a piece of plastic was observed

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y5/3**

hard, moist, fine to coarse sand 5%, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular  
increasing sand content, very stiff

**GRAYISH BROWN CLAYEY SILT (ML) 2.5Y5/2**

hard, moist, fine to coarse sand 5%, subrounded-subangular

Boring terminated at 9.0 feet bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
5. Groundwater not encountered during drilling.
6. Boring backfilled with cement-bentonite grout on 1-24-94.

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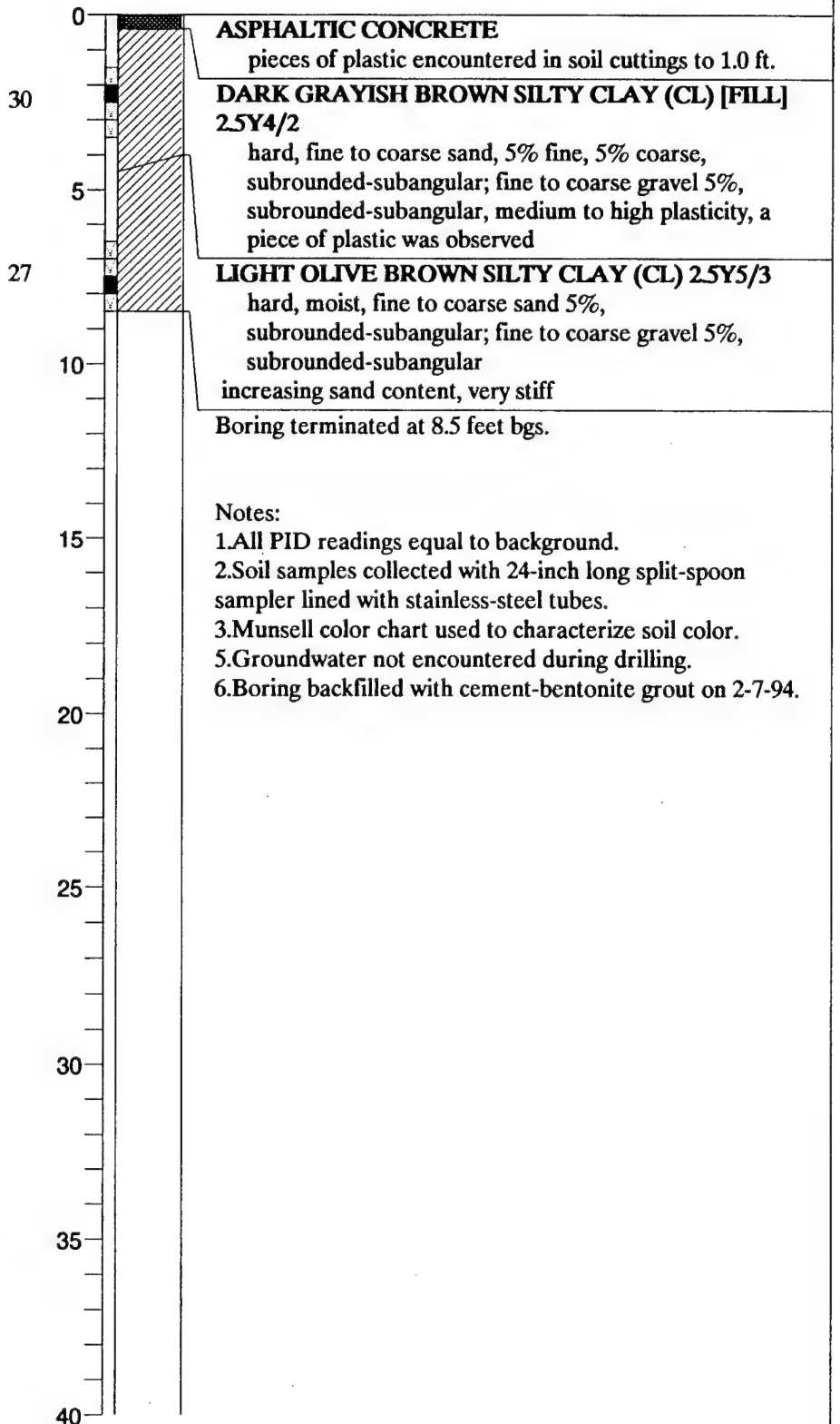
Fort Benjamin Harrison  
Marion County, Indiana

Figure H72

Log of Boring SM25fSB001

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B  
ELEVATION 856.4 ft. DATE 2/7/94



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Marion County, Indiana

Figure H73  
Log of Boring SM25fSB01A

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

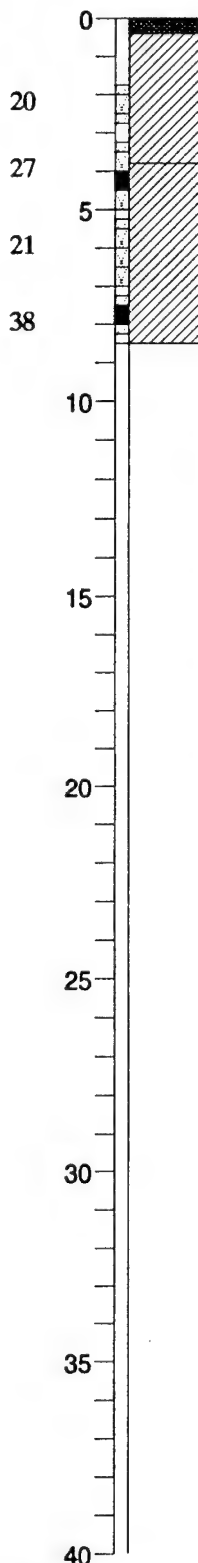
Summit CME 75-B

ELEVATION

856.5 ft.

DATE

1/24/94



**ASPHALTIC CONCRETE**

pieces of plastic observed to 1.0 ft. bgs

**DARK GRAYISH BROWN SILTY CLAY (CL) [FILL] 2.5Y4/2**

very stiff, fine to coarse sand, 5% fine, 5% medium to coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular, pieces of plastic, not very homogeneous, cobbles approximately 4-inches dia.

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y4/2**

very stiff, fine to coarse sand, 5% fine, 5% medium to coarse; fine gravel 5%, subrounded-subangular, medium to high plasticity  
hard

Boring terminated at 8.5 feet bgs.

Notes:

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
5. Groundwater not encountered during drilling.
6. Boring backfilled with cement-bentonite grout on 1-24-94.

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Figure H74

Log of Boring SM25fSB002

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT

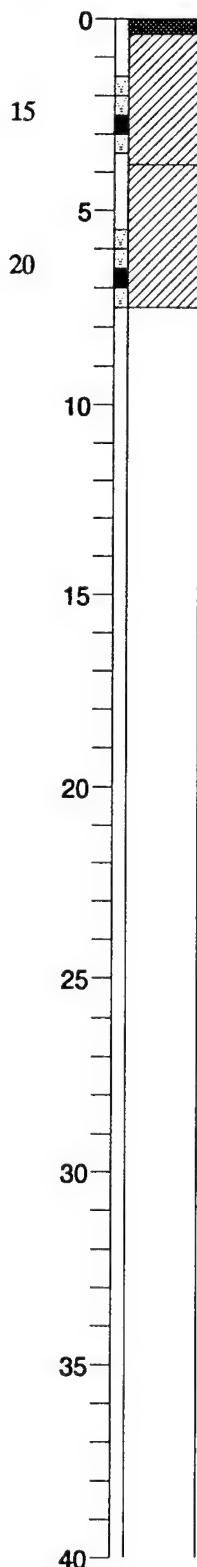
Summit CME 75-B

ELEVATION

856.5 ft.

DATE

2/7/94



**ASPHALTIC CONCRETE**

pieces of plastic observed to 1.0 ft. bgs

**DARK GRAYISH BROWN SILTY CLAY (CL) [FILL] 2.5Y4/2**

very stiff, fine to coarse sand, 5% fine, 5% medium to coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular, pieces of plastic, not very homogeneous, cobbles approximately 4-inches dia.

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y4/2**

very stiff, fine to coarse sand, 5% fine, 5% medium to coarse; fine gravel 5%, subrounded-subangular, medium-high plasticity

hard

Boring terminated at 7.5 feet bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
5. Groundwater not encountered during drilling.
6. Boring backfilled with cement-bentonite grout on 2-7-94.

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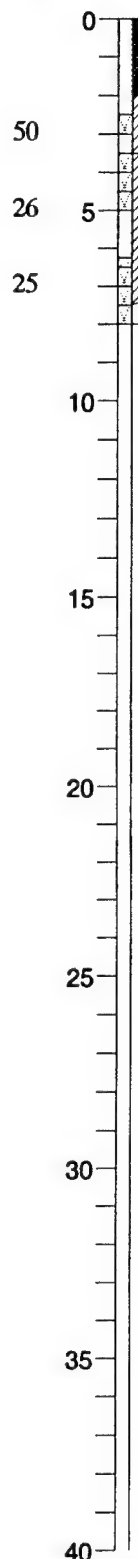
Figure H75

Log of Boring SM25fSB02A

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B

ELEVATION 857.6 ft. DATE 1/24/94



**ASPHALTIC CONCRETE**

pieces of plastic observed to 0.5 ft. bgs, concrete at 1.0 ft. bgs

**DARK GRAYISH BROWN SILTY CLAY (CL) [FILL] 2.5Y4/2**

hard, fine to coarse sand, 5% fine, 5% medium to coarse, subrounded-subangular; fine to coarse gravel 5%, subrounded-subangular, concrete at 3.0 to 3.5 ft. bgs

**LIGHT OLIVE BROWN SILTY CLAY (CL) 2.5Y4/2**

very stiff, moist, fine to coarse sand, 5% fine, 5% medium to coarse; fine gravel 5%, subrounded-subangular, medium to high plasticity

**LIGHT OLIVE BROWN CLAYEY SILT (ML) 2.5Y4/2**

very stiff, very moist, fine to coarse sand, 5% fine, 5% medium to coarse, low plasticity

Boring terminated at 8.0 feet bgs.

**Notes:**

1. All PID readings equal to background.
2. Soil samples collected with 24-inch long split-spoon sampler lined with stainless-steel tubes.
3. Munsell color chart used to characterize soil color.
5. Groundwater not encountered during drilling.
6. Boring backfilled with cement-bentonite grout on 1-24-94.

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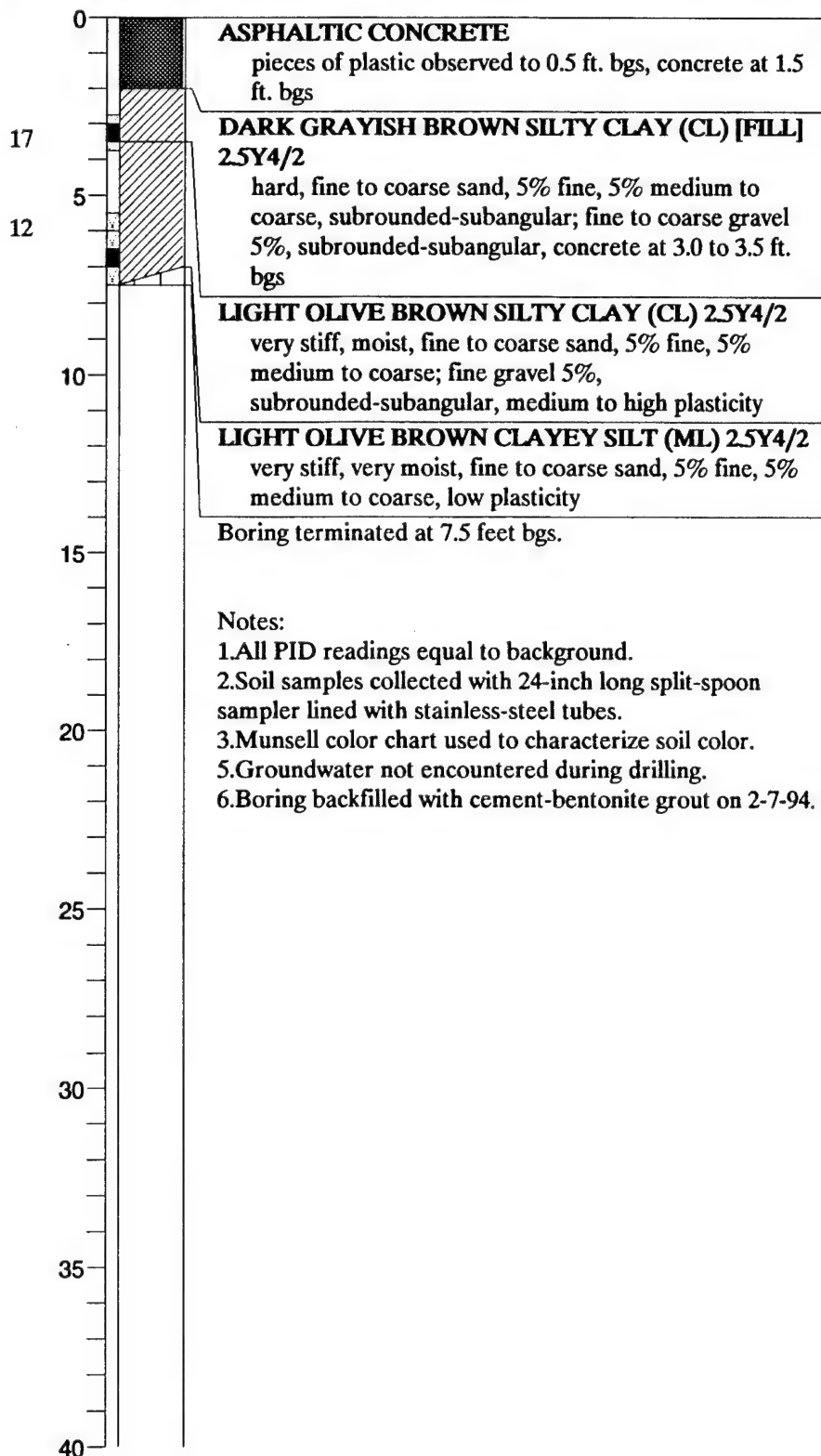
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Fort Benjamin Harrison  
Marion County, Indiana

Figure H76

Log of Boring SM25fSB003

Blows/12"  
Depth (ft)  
Sample

EQUIPMENT Summit CME 75-B  
ELEVATION 857.6 ft. DATE 2/7/94



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Figure H77

Log of Boring SM25fSB03A

## **Appendix I**

### **STREAM DISCHARGE CALCULATIONS**

This Appendix describes the method and results for stream velocity measurements taken at FBH. Stream velocity and cross-sectional area measurements were taken at each stream surface-water sampling location. This information was used to estimate volumetric flow rate (stream discharge) at surface-water sampling locations.

The following sections describe the stream discharge measurements and calculations.

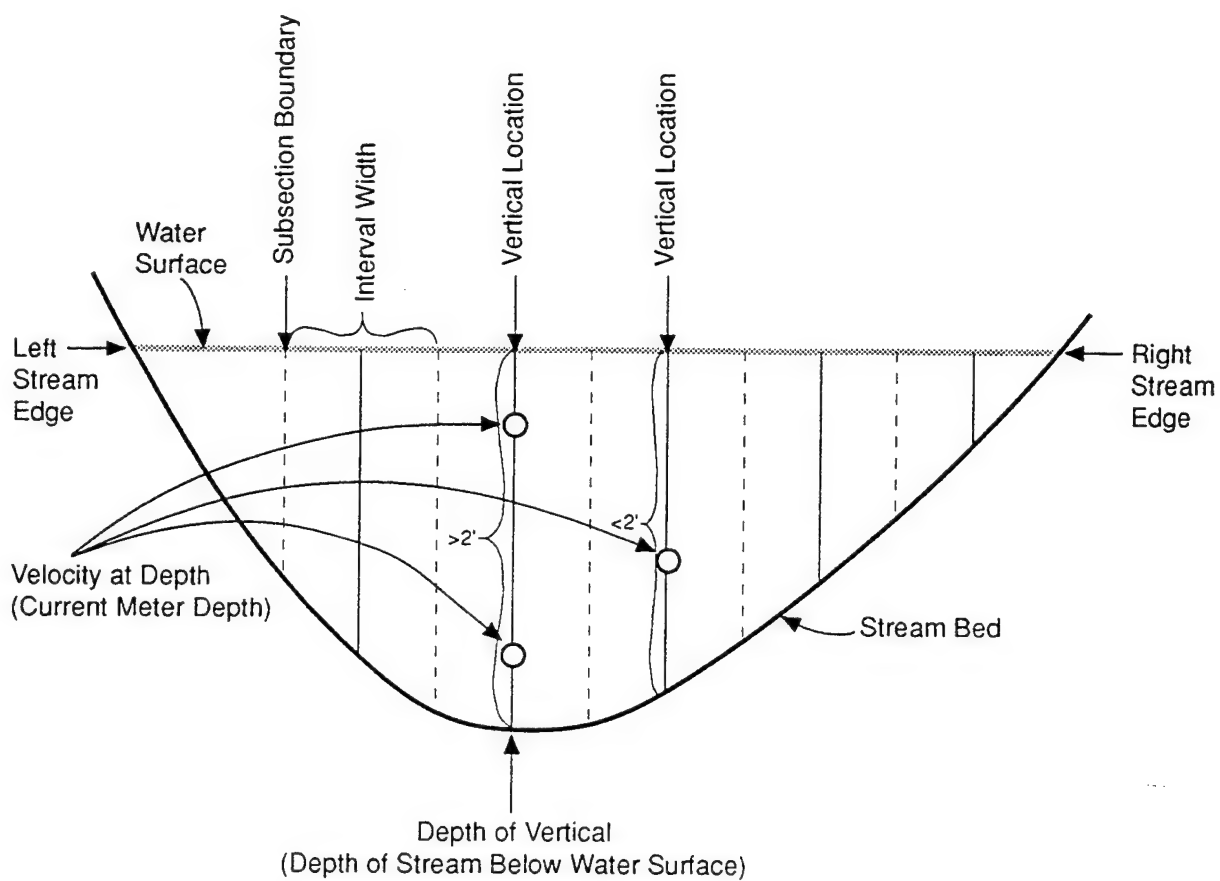
### **Stream Discharge Calculations**

The procedure used to calculate stream discharge at FBH surface-water sampling locations was as follows:

1. The total stream width was measured and the gross characteristics of the stream flow were observed. Based on these characteristics, the stream was subdivided into subsections with central vertical locations and boundaries that were equidistant between adjacent vertical locations. The right and left stream edges (cross-sectional view) were treated as vertical locations. The distances between subsection boundaries were calculated and referred to as the Interval Width (see Figure I1 for a schematic stream cross section).
2. The total water depth at each vertical location (center of subsection) was then measured. This depth is referred to as the Depth of Vertical. Based on the Depth of Vertical, the vertical orientation of the flow meter was determined. If the Depth of Vertical was found to be greater than 2 feet, the stream velocity would be measured at 2/10 and 8/10 of the Depth of Vertical (from water surface). If the Depth of Vertical was found to be 2 feet or less, the stream velocity would be measured at 6/10 of the Depth of Vertical. The stream flow velocities measured at each depth were called the Velocity at Depth. The Mean Velocity (feet per second) was then calculated by averaging the Velocity at Depth values measured for each vertical. The right and left edges of each stream were assumed to have zero Mean Velocity.
3. The Sampling Interval Area was calculated by multiplying the Depth of Vertical by the Interval Width.
4. The Sampling Interval Discharge was calculated by multiplying each Sampling Interval Area by its corresponding Mean Velocity.
5. The Total Stream Discharge (cubic feet per second) was determined by summing the Sampling Interval Areas.

These calculations were performed on Lotus spreadsheets. Tables I1 through I6 show the Total Stream Discharge calculations for each (stream) surface-water sampling location (SM020SW001, SM020SW002, SM022SW001, SM022SW002, SM023SW001, and SM023SW002, respectively).





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Figure I1

Schematic Stream Cross Section Showing  
Current Flow Measurement Terminology

**Table 11: Stream Discharge Calculation at Location SM020SW001**

Interval Distance from Bank (feet)	Interval Width (feet)	Distance of Vertical from Bank (feet)	Depth of Stream at Vertical (feet)	Current Meter Depth (feet)	Flow Velocity at Depth (feet/sec)	Mean Velocity (feet/sec)	Interval Area (sq. feet)	Interval Discharge (cfs/sec)
0-0.5	0.75	--	--	--	--	--	--	--
0.5-4.5	3.50	2.5	0.35	0.21	2.25	2.24	1.23	2.74
4.5-5.0	0.75	--	--	--	--	--	--	--
TOTALS:							1.23	2.74

Vertical and current meter depths were measured from water surface  
 Total stream width = 5.00 feet  
 Measurements taken 2/15/94

-- Not applicable or measurements not collected due to shallow water depth

**Table 12: Stream Discharge Calculation at Location SM020SW002**

Interval Distance from Bank (feet)	Interval Width (feet)	Distance of Vertical from Bank (feet)	Depth of Stream at Vertical (feet)	Current Meter Depth (feet)	Flow Velocity at Depth (feet/sec)	Mean Velocity (feet/sec)	Interval Area (sq. feet)	Interval Discharge (cf/sec)
0-2.63	1.00	--	--	--	--	--	--	--
2.63-7.88	8.50	5.25	0.20	0.12	1.58	1.58	1.70	2.69
7.88-10.50	1.00	--	--	--	--	--	--	--
TOTALS:								2.69

Vertical and current meter depths were measured from water surface  
Total stream width = 10.5 feet  
Measurements taken 2/15/94

-- Not applicable or measurements not collected due to shallow water depth

**Table 13: Stream Discharge Calculation at Location SM022SW001**

Interval Distance from SW Bank (feet)	Interval Width (feet)	Distance of Vertical from SW Bank (feet)	Depth of Stream at Vertical (feet)	Current Meter Depth (feet)	Flow Velocity at Depth (feet/sec)	Mean Velocity (feet/sec)	Interval Area (sq. feet)	Interval Discharge (cf/sec)
0-1.00	1.00	--	--	--	--	--	--	--
1.00-3.68	2.68	2.0	1.42	0.85	0.05	0.05	3.81	0.19
3.68-7.03	3.35	5.35	1.95	1.17	0.17	0.17	6.53	1.11
7.03-9.70	2.67	8.7	1.30	0.78	0.07	0.07	3.47	0.24
9.70-10.70	1.00	--	--	--	--	--	--	--
TOTALS:								13.81 1.54

Vertical and current meter depths were measured from water surface  
 Total stream width = 10.7 feet  
 Measurements taken 2/15/94

-- Not applicable or measurements not collected due to shallow water depth

**Table I4: Stream Discharge Calculation at Location SM022SW002**

Interval Distance from Bank (feet)	Interval Width (feet)	Distance of Vertical from Bank (feet)	Depth of Stream at Vertical (feet)	Current Meter Depth (feet)	Flow Velocity at Depth (feet/sec)	Mean Velocity (feet/sec)	Interval Area (sq. feet)	Interval Discharge (cf/sec)
0-2.55	2.55	--	--	--	--	--	--	--
2.55-7.65	5.10	5.10	0.52	0.31	1.16	1.16	2.65	3.08
7.65-10.20	2.55	--	--	--	--	--	--	--
TOTALS:								3.08

Vertical and current meter depths were measured from water surface

Total stream width = 10.2 feet

Measurements taken 2/15/94

-- Not applicable or measurements not collected due to shallow water depth

**Table I5: Stream Discharge Calculation at Location SM023SW001**

Interval Distance from South Bank (feet)	Interval Width (feet)	Distance of Vertical from South Bank (feet)	Depth of Stream at Vertical (feet)	Current Meter Depth (feet)	Flow Velocity at Depth (feet/sec)	Mean Velocity (feet/sec)	Interval Area (sq. feet)	Interval Discharge (cf/sec)
0-2.80	1.0	--	--	--	--	--	--	--
2.80-8.40	9.2	5.6	0.62	0.37	0.42	0.42	3.47	1.46
8.40-11.20	1.0	--	--	--	--	--	--	--
TOTALS:							3.47	1.46

Vertical and current meter depths were measured from water surface  
 Total stream width = 11.2 feet  
 Measurements taken 2/17/94

-- Not applicable or measurements not collected due to shallow water depth

**Table 16: Stream Discharge Calculation at Location SM023SW002**

Interval Distance from South Bank (feet)	Interval Width (feet)	Distance of Vertical from South Bank (feet)	Depth of Stream at Vertical (feet)	Current Meter Depth (feet)	Flow Velocity at Depth (feet/sec)	Mean Velocity (feet/sec)	Interval Area (sq. feet)	Interval Discharge (cfs/sec)
0-0.63	0.63	--	--	--	--	--	--	--
0.63-1.88	1.25	1.25	0.33	0.20	0.02	0.41	0.41	0.01
1.88-3.68	1.80	2.5	0.30	0.18	1.85	1.85	0.54	1.00
3.68-6.03	2.35	4.85	0.25	0.15	1.32	1.32	0.59	0.78
6.03-7.20	1.17	--	--	--	--	--	--	--
TOTALS:							1.54	1.78

Vertical and current meter depths were measured from water surface

Total stream width = 7.2 feet  
Measurements taken 2/17/94

-- Not applicable or measurements not collected due to shallow water depth

**Appendix J**

**BULLET FRAGMENT ANALYSIS**



## **Appendix J**

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### **INTRODUCTION**

As part of the EI, surface and subsurface soil samples were collected at the Foreman Rifle Range (EI Site SM22), the State Police Pistol Range (EI Site SM23), and the Skeet/Rifle Range (EI Site SM24) and analyzed for bullet, bullet fragment and/or shotgun shot content. The activities performed at these individual SWMUs are described in Sections 4.11, 4.12, and 4.13. A description of the procedures for analyzing the bullet, bullet fragment, and shotgun shot content of soil samples, and a summary of the results of the analyses, are described in the following sections.

### **PROCEDURES**

#### ***Soil Collection and Sample Preparation Procedures***

Surface-soil samples were collected from a depth of 0.0 to 0.5 foot bgs using a stainless-steel spoon. A hand auger was used to collect subsurface soil samples from each boring in 0.5-foot increments to the total depth augered (3.0 feet bgs). Each surface soil and subsurface soil sample collected for bullet/bullet fragment content analysis was contained in a labeled, plastic resealable bag. After the samples were transported to HLA's field operations trailer, each individual sample was placed in a labeled aluminum pan and allowed to thoroughly dry at room temperature.

#### ***Sample Sieving and Weighing Procedures***

After soil samples were dried, each individual sample was weighed using a triple-beam balance (Ohaus 800 Series) to measure the total mass of the soil and bullet/bullet fragments present in the sample. Each sample was then individually sieved through a No. 7 (2.80 millimeter) wire mesh sieve. Bullets and bullet fragments were removed from the sieved sample and weighed separately to measure the bullet mass in grams.

Because the shotgun shot at the Skeet/Rifle Range was considerably smaller than the No. 7 (2.80 millimeter) wire mesh sieve, additional sieving of these samples was required using a finer wire mesh. Therefore, the portion of the sample that passed through the No. 7 sieve was sieved a second time using aluminum window screen as a sieve. This was done by shaping the aluminum window

## **Appendix J**

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screen into the approximate shape of a basket. The portion of the soil sample passing through the No. 7 sieve was poured into the screen "basket", and the screen "basket" containing the soil sample was then partially submerged into a bucket of tap water to wash the soil fines through the screen, leaving the shotgun shot and sand-size grains. The shot was removed from the screen and allowed to dry prior to weighing. Once dry, the shot and/or bullets (if present) were weighed to measure the total bullet/shot mass of each sample.

It should be noted that when the borings were advanced and subsurface soil samples were collected using a hand auger, bullets and/or shotgun shot, if present in the shallow subsurface soil, potentially could have fallen down from the sides of the borehole, thus biasing the bullet/shot content of the deeper soil samples. However, it is not believed that this phenomenon greatly influenced the results of this analysis.

## **RESULTS**

Tables J1, J2, and J3 present the results of the bullet fragment analysis for each firing range, including the mass of soil and bullet fragments and the mass of bullet fragments for each site identification and sample depth. The tables also include a percent of bullet fragments in the sample, which was calculated for each sampling location and depth by dividing the bullet fragment mass into the total mass of soil and bullet fragments.

**Table J1: Bullet Fragment Analysis Results for Foreman Rifle Range,  
Near Buildings 811 and 812 (EI Site SM22), Fort Benjamin Harrison**

Sample Identification	Sample Depth (feet)	Mass of Soil (dry) and Bullets (grams)	Mass of Bullet Fragments (grams)	Percent Bullet Fragments (%)
SM022SS001	0.0 - 0.5	1020.30	83.53	8.19
SM022SB001	0.5 - 1.0	1062.40	70.10	6.60
	1.0 - 1.5	629.27	64.58	10.26
	1.5 - 2.0	847.72	32.86	3.88
	2.0 - 2.5	1099.93	0.00	0.00
SM022SS002	0.0 - 0.5	994.69	159.05	15.99
SM022SB002	0.5 - 1.0	1004.13	28.41	2.83
	1.0 - 1.5	1036.55	19.80	1.91
	1.5 - 2.0	1121.28	52.10	4.65
	2.0 - 2.5	1135.71	0.28	0.02
SM022SS003	0.0 - 0.5	893.03	34.52	3.87
SM022SB004	0.5 - 1.0	1106.73	0.35	0.03
	1.0 - 1.5	1105.85	7.97	0.72
	1.5 - 2.0	1078.24	0.10	0.01
	2.0 - 2.5	1166.04	2.10	0.18
SM022SS004	0.0 - 0.5	970.65	12.71	1.31
SM022SB004	0.5 - 1.0	1177.62	0.00	0.00
	1.0 - 1.5	1162.38	4.80	0.41
	1.5 - 2.0	1089.27	0.00	0.00
	2.0 - 2.5	1166.37	0.00	0.00
SM022SS005	0.0 - 0.5	662.00	30.72	4.64
SM022SB005	0.5 - 1.0	1064.29	0.46	0.04
	1.0 - 1.5	1023.94	0.00	0.00
	1.5 - 2.0	997.55	4.60	0.46
	2.0 - 2.5	646.28	0.13	0.02
SM022SS006	0.0 - 0.5	473.51	1.98	0.42
SM022SS007	0.0 - 0.5	374.30	30.06	8.03
SM022SS008	0.0 - 0.5	615.05	116.02	18.86
SM022SS009	0.0 - 0.5	465.63	66.94	14.38
SM022SS010	0.0 - 0.5	498.62	14.60	2.93
SM022SS011	0.0 - 0.5	257.81	8.78	3.41

Soil samples were collected on January 6, 1994.

**Table J2: Bullet Fragment Analysis Results for State Police Pistol Range,  
Near Building 815 (EI Site SM23), Fort Benjamin Harrison**

Sample Identification	Sample Depth (feet)	Mass of Soil (dry) and Bullets (grams)	Mass of Bullet Fragments (grams)	Percent Bullet Fragments (%)
SM023SS001	0.0 - 0.5	1612.80	472.00	29.27
SM023SB001	0.5 - 1.0	1687.90	31.00	1.84
	1.0 - 1.5	2011.70	1.90	0.09
	1.5 - 2.0	888.70	15.50	1.74
	2.0 - 2.5	2386.60	2.70	0.11
SM023SS002	0.0 - 0.5	1725.00	210.90	12.23
SM023SB002	0.5 - 1.0	1676.60	16.20	0.97
	1.0 - 1.5	2692.20	17.30	0.64
	1.5 - 2.0	1676.20	55.30	3.30
	2.0 - 2.5	2040.70	9.00	0.44
SM023SS003	0.0 - 0.5	1649.60	278.10	16.86
SM023SB003	0.5 - 1.0	1585.00	57.40	3.62
	1.0 - 1.5	2368.30	19.40	0.82
	1.5 - 2.0	1770.40	20.60	1.16
	2.0 - 2.5	1763.30	19.40	1.10
SM023SS004	0.0 - 0.5	3051.81	1527.75	50.06
SM023SB004	0.5 - 1.0	1592.91	272.04	17.08
	1.0 - 1.5	1297.22	13.05	1.01
	1.5 - 2.0	1474.62	0.51	0.03
	2.0 - 2.5	1601.50	2.91	0.18
SM023SS005	0.0 - 0.5	334.96	24.41	7.29
SM023SB005	0.5 - 1.0	364.72	20.81	5.71
	1.0 - 1.5	1088.90	0.00	0.00
	1.5 - 2.0	1658.72	0.00	0.00
	2.0 - 2.5	353.04	0.00	0.00
SM023SS006	0.0 - 0.5	544.85	186.22	34.18
SM023SS007	0.0 - 0.5	542.08	176.50	32.56
SM023SS008	0.0 - 0.5	1168.83	522.80	44.73
SM023SS009	0.0 - 0.5	661.20	11.67	1.76
SM023SS010	0.0 - 0.5	752.67	1.31	0.17

Soil samples were collected on December 8-9, 1993.

**Table J3 (continued)**

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Soil samples were collected on February 19, 1994 and April 6, 1994.

- a. Includes 0.28 percent due to weight of bullet cartridge(s)
- b. Includes 4.05 percent due to weight of bullet cartridge(s)
- c. Includes 4.07 percent due to weight of bullet cartridge(s)

**Table J3: Bullet Fragment Analysis Results for Skeet/Rifle Range,  
Near Buildings 819 through 822 (EI Site SM24), Fort Benjamin Harrison**

Sample Identification	Sample Depth (feet)	Mass of Soil (dry) and Bullets (grams)	Mass of Bullet Fragments (grams)	Percent Bullet Fragments (percent)
SM024SS001	0.0 - 0.5	263.90	5.40	2.05
SM024SB001	0.5 - 1.0	1144.50	0.20	0.02
	1.0 - 1.5	958.70	0.00	0.00
	1.5 - 2.0	1150.60	0.00	0.00
	2.0 - 2.5	1162.35	0.70	0.06
SM024SS002	0.0 - 0.5	381.00	4.50	1.18
SM024SB002	0.5 - 1.0	1147.70	0.30	0.03
	1.0 - 1.5	1179.00	0.05	0.00
	1.5 - 2.0	1150.30	0.05	0.00
	2.0 - 2.5	1159.70	0.00	0.00
SM024SS003	0.0 - 0.5	375.00	33.25	8.87
SM024SB003	0.5 - 1.0	1225.50	0.05	0.00
	1.0 - 1.5	1020.95	0.05	0.00
	1.5 - 2.0	1241.80	0.00	0.00
	2.0 - 2.5	1423.30	0.00	0.00
SM024SS004	0.0 - 0.5	609.50	26.90	4.41
SM024SB004	0.5 - 1.0	965.00	0.90	0.09
	1.0 - 1.5	1334.20	1.65	0.12
	1.5 - 2.0	1013.90	0.05	0.00
	2.0 - 2.5	1044.00	0.05	0.00
SM024SS005	0.0 - 0.5	411.65	77.20	18.75
SM024SB005	0.5 - 1.0	859.50	1.10	0.13
	1.0 - 1.5	1174.30	0.50	0.04
	1.5 - 2.0	1479.00	0.20	0.01
	2.0 - 2.5	1016.20	0.00	0.00
SM024SS006	0.0 - 0.5	200.60	0.10	0.05
SM024SS007	0.0 - 0.5	392.00	10.00	2.55
SM024SB007	0.5 - 1.0	1043.70	0.10	0.01
	1.0 - 1.5	1033.60	0.05	0.00
	1.5 - 2.0	1005.00	0.05	0.00
	2.0 - 2.5	1271.20	0.05	0.00
SM024SS008 <sup>a</sup>	0.0 - 0.5	543.15	12.00	2.21
SM024SS009 <sup>b</sup>	0.0 - 0.5	358.30	19.50	5.44
SM024SS010 <sup>c</sup>	0.0 - 0.5	368.70	52.50	14.24
SM024SS011	0.0 - 0.5	501.95	0.20	0.04
SM024SS012	0.0 - 0.5	644.50	53.50	8.30
SM024SS013	0.0 - 0.5	647.35	0.30	0.05
SM024SS014	0.0 - 0.5	383.40	9.50	2.48
SM024SS015	0.0 - 0.5	316.80	0.50	0.16
SM024SS016	0.0 - 0.5	537.00	12.10	2.25
SM024SS017	0.0 - 0.5	129.00	0.70	0.54

**Table J3 (continued)**

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Soil samples were collected on February 19, 1994 and April 6, 1994.

- a. Includes 0.28 percent due to weight of bullet cartridge(s)
- b. Includes 4.05 percent due to weight of bullet cartridge(s)
- c. Includes 4.07 percent due to weight of bullet cartridge(s)

## **Appendix K**

### **GEOPHYSICAL METHODS, EQUIPMENT, AND FIELD PROCEDURES**



HLA's surface geophysical investigation was performed intermittently at nine sites between September 14, 1993 and January 20, 1994. The objectives of the investigation were to detect and locate buried materials such as drums, residual site substructures, or landfill material, and to delineate areas of anomalous geophysical response indicative of subsurface disposal. The geophysical methods used during this investigation were electromagnetic profiling (EM), ground penetrating radar (GPR), and pipe and cable locator (M-Scope). This appendix discusses the methods, equipment, field procedures, and data evaluation for the geophysical surveys. Site maps and specific conclusions by EI Site are discussed in Section 4.0.

### **ELECTROMAGNETIC PROFILING**

The EM method employs a portable power source, transmitter and receiver coils to induce and measure an electromagnetic current in the ground. The strength of the induced current provides a measure of electrical conductivity of the underlying materials. Variations in electrical conductivity provide evidence for disturbances in the sediment or the existence of buried objects.

Electrical current flowing in the transmitter coil generates a primary electromagnetic field, which in turn induces small electrical currents called secondary currents to flow in the ground under the instrument. These secondary currents in turn create a secondary electromagnetic field, which is measured in the receiver coil. Ground (terrain) conductivity is linearly proportional to the ratio between primary and secondary field strengths; thus, the EM instrument provides a direct measurement of terrain conductivity. The EM system is also susceptible to the presence of buried conductors, including both ferrous and non-ferrous metals. Metal objects such as steel drums are electrically conductive compared to native soil and can be detected by the anomalous conductivity values they produce.

Two components of the secondary field strength of the EM signal were measured: the quadrature phase and in-phase components. The quadrature phase component is simply the ratio of the

## **Appendix K**

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secondary field to the primary magnetic field; it provides the terrain conductivity measurement and is expressed in millimhos per meter. The in-phase component of the EM signal is a measure of signal strength, and is expressed in millivolts. The in-phase component is relatively insensitive to changes in ground conductivity, but is particularly sensitive to buried metal objects.

A Geonics Ltd. Model EM31-D electromagnetic terrain conductivity system, which can measure subsurface conditions to a depth of approximately 20 feet, was used in this investigation. The EM31-D was connected to a two-channel chart recorder and a digital data logger for continuous data acquisition along the survey transects.

The EM system does not give specific information on the depth of subsurface objects but is effective in estimating their lateral extent. The instrument is not effective within approximately 25 feet of surface metal structures or materials because of interference from these items.

### **GROUND PENETRATING RADAR**

The GPR system uses radar technology to obtain a continuous high-resolution graphical profile of shallow subsurface features. GPR transmits a signal that is coupled to the ground by an antenna. When the subsurface signal encounters a boundary between media of different electrical properties, such as that between buried landfill material and overlying soil, some of the energy is reflected back to the surface, received by the antenna, amplified, and displayed on a graphic recorder. The output from a GPR scan line results is a continuous graphic profile record of the subsurface. The printout of the radar profile is available in the field to facilitate onsite interpretation of subsurface conditions.

A Geophysical Survey Systems, Inc. (GSSI) Model SIR-8 system connected to a 500-MHz antenna was used for this investigation. Unlike the other systems used during this survey, GPR data are unaffected by the presence of nearby surface metal and nonmetal objects. The GPR system also can provide more quantitative information than the EM system regarding the lateral extent and the depth

to a buried object; however, the depth of penetration of the GPR signal depends on the soil conductivity and the frequency of the antenna employed. The maximum GPR signal penetration depth was approximately 4 feet for the nine sites.

### **M-SCOPE**

The Fisher Model TW-6 Scope is an electromagnetic system similar in principle to the EM31-D. The M-Scope is susceptible primarily to metal objects. The unit consists of separate transmitter and receiver components connected by a carrying handle. The unit emits an audible tone when held near metal objects. Unlike the EM31-D, the M-Scope can detect metal objects as small as one or two feet in diameter. The M-Scope is effective to depths of approximately 4 to 5 feet and can be used for subsurface investigations to within approximately 6 feet of surface metal structures.

### **FIELD PROCEDURES**

All geophysical equipment was tested prior to mobilization to Fort Benjamin Harrison. At the site, the equipment was calibrated and tuned for local conditions according to manufacturers' operators manuals.

Field work at each site was conducted in four stages: first, horizontal control was installed; second, the EM and M-Scope surveys were performed; third, site maps were prepared. Finally, GPR profiles were obtained. The GPR survey was performed after the EM and M-Scope data were reviewed to insure that GPR profiles were obtained in areas of anomalous EM and M-Scope response.

### **Horizontal Control Installation**

Survey control was established at each site by first installing a baseline along one side of the site. Pin flags were placed at 40-foot intervals along this line. Survey transects perpendicular to the baseline were then installed by using a fiberglass tape measure to form a 3-4-5 right triangle. In this manner, a 40-foot pin flag grid was installed in each survey area. By interpolating survey transects midway between the rows of pin flags, the EM and M-Scope surveys were performed along transects

## **Appendix K**

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spaced 20 feet apart. The 20-foot transect spacing insured that the area between survey transects was within the EM31-D's radius of investigation.

### **EM31-D and M-Scope Surveys**

The EM profiling data were obtained by carrying the portable EM system along the rows of pin flags, and midway between the row of pin flags at each site. Two components of the EM signal (in-phase and terrain conductivity) were digitally recorded at 1-second intervals by the data logging system. Additionally, the two components were recorded as continuous analog traces on a 2-channel chart recorder. Stationing along each transect was marked by inserting a special flagging record into the digital data file and by describing the analog chart record at 40-foot intervals as pin flags were passed. Upon completion of the EM survey for each site, the digital data were transferred to a laptop computer and also copied to backup data disks for permanent storage.

The M-Scope was used to scan the site along the same transects and the EM. No M-Scope data were recorded, but the locations of anomalous responses were marked on the ground using spray paint and recorded on site maps.

### **Site Features Map**

Site maps for each survey area were prepared by using the installed pin flag grids to locate and plot prominent surface features onto grid paper. The locations of M-Scope anomalies were also placed on the site maps. In addition, analog EM data records were reviewed in the field, and the EM anomaly locations were plotted on the maps.

### **GPR Profiling Survey**

The GPR instrumentation was mounted in a field vehicle and driven to the survey areas. GPR profiles were obtained by hand pulling the 500-MHz antenna along accessible portions of the survey transects. The GPR survey was limited by the antenna cable length to within 90 feet of the field

vehicle. In the large area outside Building 810 (SWMU #FBH11), the 500 MHz antenna was fastened to the field vehicle and driven along the survey transects.

### **DATA ANALYSIS AND INTERPRETATION**

Preliminary interpretation of the geophysical data was done in the field to evaluate the instruments' performance and allow for extensions of the survey grids to better delineate anomalous areas, if necessary. Upon completion of the field work, all data were returned to HLA's Novato, California office for final analysis and QC review.

### **CRITERIA USED TO ESTIMATE THE LOCATION OF POTENTIAL BURIAL SITES**

EM anomalies associated with buried drums, landfill material, or other buried objects are usually evaluated in terms of increases or decreases in terrain conductivity over established background values, and also by rapid changes in the in-phase response. Background EM data obtained outside the site boundaries showed that the conductivities of the upper 20 feet of undisturbed native soils ranged from 20 mmho/m at SWMU #FBH11 to 35 mmho/m at EI Site SM25c. EM survey data indicate that conductivity anomalies associated with buried materials typically show values that rise above the background levels. Rapid changes in the in-phase response (positive or negative) caused by nearby metal are also an indicator of buried drums or landfill material.

The presence of subsurface disposal areas can be discerned on the basis of anomalous EM readings above or below background values, indicating the presence of subsurface features different from those in the surrounding unaffected areas. For this analysis, anomalous signals were divided into 2 categories: medium amplitude (Type A) anomalies and high amplitude Type B) anomalies. Medium amplitude anomalies varied between 10 percent and 20 percent of the selected EM range from the background levels. They are believed to indicate possible fill areas with little or no metal, or areas of increased soil moisture. High amplitude anomalies are those that varied greater than 20 percent from background and are believed to represent areas of substantial buried metal.

## **Appendix K**

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To evaluate the EM data, it was necessary to recognize that soil conductivities tend to increase with increased soil moisture. In particular, although the higher conductivity areas at SWMU #FBH25c at the golf course qualify as a medium amplitude anomalies, they are probably caused by irrigation, and not subsurface disposal.

The M-Scope anomaly criterion is straightforward. When properly tuned to the local site conditions, the instrument will produce an audible tone when held within 5 feet of buried metal.

The extent of disposal areas can be mapped by correlating areas of anomalous geophysical response recorded on adjacent survey transects. Anomalous responses occurring in the same general area along several adjacent transects may be indicative of widespread landfilling, while anomalous responses that occur along a single transect without corresponding anomalies on adjacent transects may be indicative of more localized buried debris.

When site conditions permit, GPR is an effective tool for locating fill areas and substructures. HLA's experience indicates that GPR profiles obtained at burial sites can show diffraction patterns at the edges of filled depressions, a continuous high amplitude reflection horizon at the base of an excavation, and chaotic, laterally discontinuous reflection patterns within the fill material. Buried floor slabs can also appear as continuous reflection horizons, while buried walls can appear as an alignment of vertical diffraction patterns. Metallic subsurface debris typically appear on GPR profiles as isolated high amplitude reflection patterns.

GPR profiles obtained for this investigation show numerous localized reflectors that correspond with the alignments of shallow pipes, buried landfill material, or buried building structures. Signal penetration is limited to approximately 3.5 to 4.0 feet at the 9 sites. This depth limitation is consistent with HLA's experience at other sites having soil conductivities in similar ranges.

**Appendix L**

**HISTORICAL MILITARY SITE PHOTOGRAPHS**



*World War I entrenchment - period of use: 1917 to 1918 (Levy, 1986)*



*World War I entrenchment - period of use: 1917 to 1918 (Levy, 1986)*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP1

Historic Military Site, SWMU #FBH 25a





*SWMU #FBH 25c: World War I dump - period of use: 1890 to 1920  
(Levy, 1986)*

*Looking southeast across the golf course fairway toward the tee for the  
10th hole.*

*Historic Military Site SWMU #FBH 25b is located along the edge of the  
wooded area shown in the left half of this photograph.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP2

Historic Military Site, SWMU #FBH 25b  
and 25c



*World War I dump - period of use: 1890 to 1920 (Levy, 1986)*

*Looking northeast across the golf course fairway for the 10th hole.*



*World War I dump - period of use: 1890 to 1920 (Levy, 1986)*

*Looking southwest across the golf course fairway for the 10th hole.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP3

Historic Military Site, SWMU #FBH 25c



*Dump (historically agricultural) - period of use: circa 1900 (Levy, 1986)*



*World War II military dump - period of use: 1946 to 1947 (Levy, 1986)*

*Clay pottery and glass fragment*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP4

Historic Military Site, SWMU #FBH 25d



*F.M. Kimberlain Homestead - period of use: 1866 to 1945*

*Bricks (lower right of photograph) may be from old cistern.*



*F.M. Kimberlain Homestead - period of use: 1866 to 1945*

*Crockery and glass fragments.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP5

Historic Military Site, SWMU #FBH 25e



*World War II dump*

*View of surface debris along edge of old dirt road leading to Lee Road.*



*World War II dump*

*Closeup view of surface debris along edge of old dirt road.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP6

Historic Military Site, SWMU #FBH 25e





*Rectangular-shaped surface depression which may be a part of the F.M. Kimberlain homestead.*



*Concrete building foundation located near Historic Military Site SWMU #FBH 25e.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP7

Historic Military Site, SWMU #FBH 25e



*Concrete bricks arranged in a rectangular pattern near Historic Military Site SWMU #FBH 25e.*



*Pile of red bricks and mortar near Historic Military Site SWMU #FBH 25e.*

Harding Lawson Associates  
Engineering and  
Environmental Services

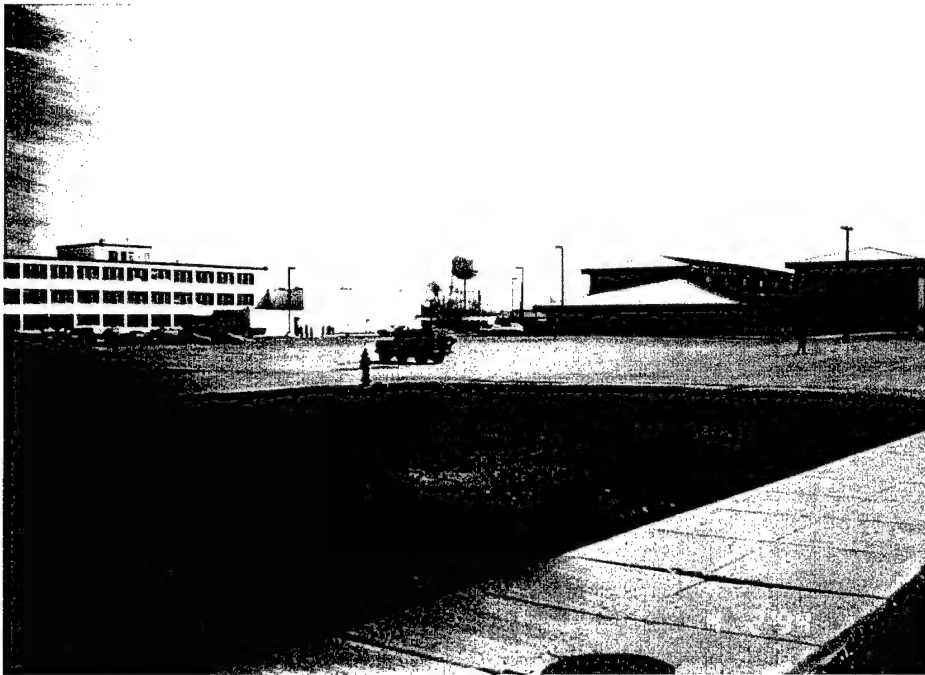


Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

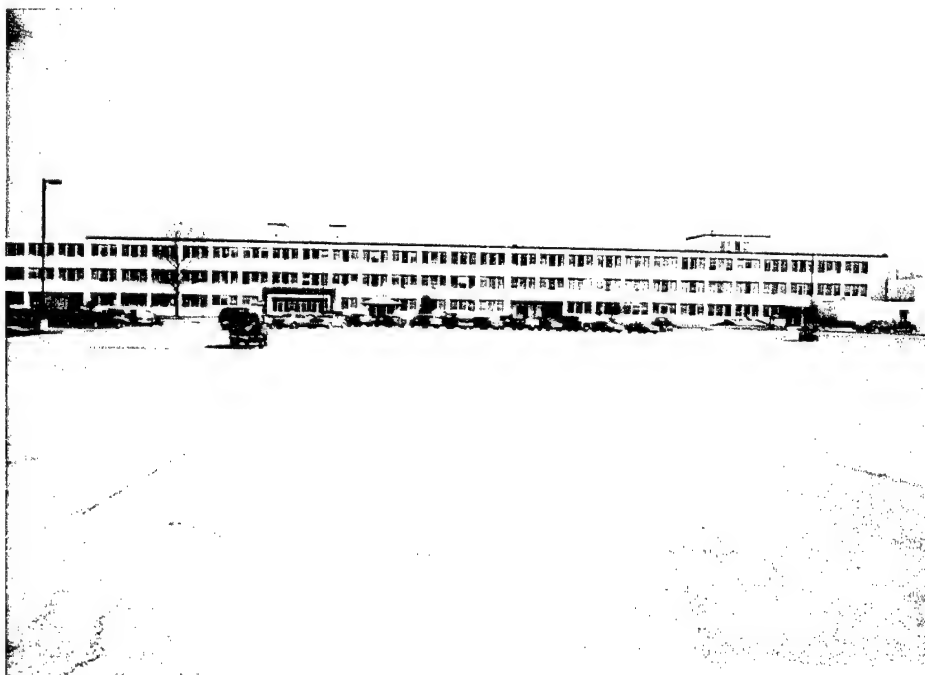
Photograph: SP8

Historic Military Site, SWMU #FBH 25e



*Lord Hall area (military dump) - period of use: 1947 (Levy, 1986)*

*Looking northeast across parking lot of Lord Hall. SWMU is located beneath paved parking lot.*



*Lord Hall area (military dump) - period of use: 1947 (Levy, 1986)*

*Looking north across parking lot toward Lord Hall. SWMU is located beneath paved parking lot.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP9

Historic Military Site, SWMU #FBH 25f





*World War I entrenchments - period of use: 1917 to 1918 (Levy, 1986)*



*World War I entrenchments - period of use: 1917 to 1918 (Levy, 1986)*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP10

Historic Military Site, SWMU #FBH 25g



*Military dump - period of use: 1930 to 1950 (Levy, 1986)*

*Construction debris.*



*Military dump - period of use: 1930 to 1950 (Levy, 1986)*

*Construction debris.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP11

Historic Military Site, SWMU #FBH 25h



*Military dump - period of use: 1930 to 1950 (Levy, 1986)*

*Construction debris.*



*Military dump - period of use: 1930 to 1950 (Levy, 1986)*

*Construction debris.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP12

Historic Military Site, SWMU #FBH 25h



*Military dump - period of use: 1930 to 1950 (Levy, 1992)*

*HLA personnel shown collecting surface soil sample.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP13

Historic Military Site, SWMU #FBH 25h



*Military historic scatter - period of use: circa 1908+ (Weston, 1992)*

*Looking east toward officer family housing.*



*Military historic scatter - period of use: circa 1908+ (Weston, 1992)*

*Looking northeast; historic military site located by a treeline.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP14

Historic Military Site, SWMU #FBH 25i





*Military dump - period of use: circa 1908+ (Weston, 1992)*

*Looking east toward officer family housing. Historic military site is located beneath lawn.*



*Military dump - period of use: circa 1908+ (Weston, 1992)*

*Looking north; historic military site is located beneath lawn.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP15

Historic Military Site, SWMU #FBH 25j



*Military dump - period of use: 1933+ (Weston, 1992)*

*View of surface debris near edge of old borrow pit.*



*Military dump - period of use: 1933+ (Weston, 1992)*

*View from old borrow pit looking toward top photograph. Majority of debris was apparently dumped near edge and down side of old borrow pit.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP16

Historic Military Site, SWMU #FBH 25k



*Military dump - period of use: 1933+ (Weston, 1992)*

*Glass and metal surface debris.*



*Military dump - period of use: 1933+ (Weston, 1992)*

*Glass and metal surface debris.*

Harding Lawson Associates  
Engineering and  
Environmental Services



Prepared for:  
U.S. Army Environmental Center  
Aberdeen Proving Ground, Maryland

Fort Benjamin Harrison  
Marion County, Indiana

Photograph: SP17

Historic Military Site, SWMU #FBH 25k



**Appendix M**

**RESPONSES TO COMMENTS REGARDING THE DRAFT PHASE I  
ENVIRONMENTAL INVESTIGATION REPORT AND  
RCRA FACILITY INVESTIGATION REPORT**

Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
REGARDING THE DRAFT PHASE I RCRA FACILITY INVESTIGATION REPORT**

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
REGARDING THE DRAFT PHASE I RCRA FACILITY INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA, MAY 4, 1994**

**I. GENERAL COMMENTS**

**Comment A**

*This review addresses only solid waste management units (SWMUs) identified in the draft RFI Report, and which are subject to the corrective action requirements of Section 206 of the Hazardous and Solid Waste Amendments of 1984. All other units at the base will be reviewed by other U.S. EPA programs and/or the State of Indiana.*

**Response**

The comment is noted.

**Comment B**

*In Section 1.1, it is stated that, "The objective of the RFI is to obtain data necessary to support corrective actions, ..." However, as stated in the RCRA Corrective Action Plan, "The purpose of the RCRA Facility Investigation is to determine the nature and extent of releases of hazardous waste or constituents from regulated units, solid waste management units (SWMUs), and other sources areas at the facility and to gather all necessary data to support the Corrective Measures Study." The wording in the report should be modified to reflect the correct objective.*

**Response**

Section 1.1 has been revised to include the referenced statement.

**Comment C**

*Figure 1.1 presents the elements of the RCRA Corrective Action Process. To be technically correct, the flow chart should also include actions that would require the implementation of interim measures, when necessary.*

**Response**

Interim measures have been added to Figure 1.1.

**Comment D**

*On page 2-17, the report correctly indicates that there are 7 SMWUs identified in the RCRA permit, but there are 16 sites identified in Table 2-4 as RFI investigation sites. Table 2-4 needs to be broken down into the seven required by the permit, and the 9 additional sites recommended for investigation in the enhanced PA. The division of the SWMUs is necessary because the 7 SWMUs identified in the permit must be addressed in the RFI as required by the permit requirements, while the data from the other 9 SWMUs will be looked at to determine whether or not they should be subject to RCRA corrective action permit requirements involving a permit modification, or whether they should be addresses only under the general base closure procedures.*

**Response**

As discussed in the June 16, 1994, meeting, the nine sites not included in the Resource Conservation and Recovery Act (RCRA) permit have been removed from the RCRA Facility Investigation (RFI) report and placed in the Environmental Investigation (EI) Report. The RFI report now includes only the sites included in the RCRA permit.

**Comment E**

*There are a number of sections identified in the draft report which were not available at the time the report was submitted to the U.S. EPA. In particular, Appendix G (Analytical Quality), Appendix J (Field Documentation - as it applies to non-groundwater sampling), and Appendix K (Boring Logs and Well Construction Diagrams). As a result, it is not possible for the U.S. EPA to make any comments on the adequacy of these submissions, and it is not possible to provide approval of the report as a whole until they are submitted and reviewed. (Problems with these sections, especially the one dealing with analytical quality, could also impact our evaluation of other parts of the report.) The U.S. EPA will review these sections when they are submitted. This subsequent review could result in the need for further revisions to the report.*

**Response**

Because of the expedited schedule for the RFI program that is necessitated by base closure, preliminary data were used in the draft report. The sections referenced above have been completed and are included in the Final Phase I RFI Report.

**II. DATA PRESENTATION COMMENTS**

**Comment A**

*The report should include a summary for each site (SWMU or Background location) and each sampling medium, consisting of the dates of the sampling, the contractor performing the sampling, and the laboratory analyzing the samples. This information could be included as a table in Section 3, or with the individual SWMU discussions in Section 4, or as part of the QA/QC summary. This information is not presented anywhere in the draft report.*

**Response**

The requested information is included in the Final Phase I RFI Report. A description of sampling locations and rationale for background samples is included in Table 3.5. Analytical data for all samples collected for the RFI are included in Appendix F.

**Comment B**

*Data presentation needs to be improved. In particular:*

- 1. All constituents which were detected must be reported, even if they were detected below "background" levels. This includes qualified values.*
- 2. For any constituents not detected, the sample detection limits must be reported.*
- 3. The sample location and depth (if appropriate) must be determinable for each analyte.*

4. *It would be very useful to have an additional set of figures similar to those in Section 4 (which identify the sampling locations at each SWMU or potential SWMU), which identify the major constituents and the levels detected at each sampling location at the SWMU. This visual presentation would give a much needed overall summary of the SWMU release environment.*

*This data is necessary in order to obtain an overall view of the constituent distribution at the SWMU. It could be used to answer questions such as: Is the hit an isolated occurrence, or is there a plume of (perhaps) lower concentrations of the constituent?*

#### **Response**

As the U.S. Environmental Protection Agency (EPA) requested, analytical data for samples collected during the RFI have been provided as Appendix F to the Final Phase I RFI report. Figures have been added to Section 4.0 that illustrate the detections above background concentrations for all sampling locations.

#### **Comment C**

*Data presentation in the report consists of summaries of the constituents detected at each SWMU. No laboratory reports are included. It is important that such reports are reviewed in order to assess data quality. However, we realize that because of the large number of samples analyzed, there is an unwieldy amount of laboratory data available. To make the review more amenable, the U.S. EPA will choose a limited number of sampling locations for which the laboratory reports are to be submitted. (The list has not yet been compiled. It will be submitted to the facility after the complete set of data analysis results are transmitted to the U.S. EPA. The facility may submit these reports separately from the RFI report).*

#### **Response**

The Army will provide a limited number of laboratory data packages to EPA for review upon request.

### **III. BACKGROUND SAMPLING AND ANALYSIS COMMENTS**

#### **Comment A**

*There appears to be a contradiction and inconsistency in units of measure related to the reporting of background levels for soil. For example, in Table 3.14 and in Table M3, hazardous constituent background levels for surface soil in the SSCB soil association are given. In Table M3 the maximum value observed for Benzo(A)anthracene is given as 10.0 µg/l, while in Table 3.14 the value is given as 10.0 mg/kg. These values should be identical. However, a value of 10 µg/l in water is approximately 10 ppb, while a value of 10 mg/kg corresponds to 10 ppm. It appears that the "µg/l" unit designation is wrong, as this unit applies to concentrations in a water matrix or in an extract, and not to the soil matrix of the samples. In addition, it appears that (based on the reporting limits in Table 3.7) the numerical values are meant to be in mg/kg. This inconsistency must be clarified and corrected.*

*Assuming that the correct units for the reported levels are all mg/kg, then the background levels of a number of constituents are high for what one would intuitively expect to find at this particular facility. In almost all cases, these high levels seem to have been caused by one or two relatively large value detects (hits), while the other reported values are nondetects. This situation needs to be examined with regard to outliers or bad background locations - see comment III.C.*

## Response

Soil analytical results should all be presented in milligrams per kilogram (mg/kg), and water analytical results should be presented in micrograms per liter ( $\mu\text{g/l}$ ). The discrepancies noted in Tables 3.14 and M3 have been corrected.

Although background locations were selected to avoid influenced areas, it appears that a few of the background samples may have been collected in areas that were influenced by past Army activities. From comparison of analytical data to field observations and boring logs, small fragments of coal were present at some of the selected background locations. Coal was used onpost for heating in the past, and it is possible that a few of the background or EI site sampling locations may be located in areas with scattered coal fragments from an old coal pile or from coal-containing fill. Although it is likely that coal fragments caused the PAH detections, the coal fragments are not related to the investigation sites being evaluated.

The Army has removed PAH analytical data for such sites from the background sample data pool. Dixon's outlier test was used to identify results in the background data set that appeared to be outliers. Once outliers were identified by this test, the results were manually reviewed along with boring logs, sampling forms or other supporting field documentation and validation results to assess the accuracy of Dixon's outlier test. For cases of one to two high detects in the midst of a group of nondetects, if the detects were greater than five times the reporting limit, the detects were treated as outliers. For detects less than five times the reporting limit, the detect was retained and not treated as an outlier.

## Comment B

*In Table M3, there are two columns identified as "Minimum Nondetected Value" and "Maximum Nondetected Value." It is not known what these terms mean. The terms need to be defined. Also, the sample detection limits, as reported by the laboratory, for all samples must be provided.*

## Response

For Table M3, "Minimum Nondetected Value" and "Maximum Nondetected Value" represent the minimum and maximum values for a particular analyte that were flagged "U" (meaning not detected at method reporting limit). For example, differences between minimum and maximum nondetected value can arise when the sample has been diluted. Footnotes have been added to the table to explain these terms. Detection limits for all samples are provided in Tables 3.8 to 3.15.

## Comment C

*In observing the frequency of detection for organics in the soil background reporting tables in Section 3 and Appendix M, it is often found that there is only one or two detects in as many as 20 samples for a particular soil association. This would suggest that there could be a problem with outliers. Because the corresponding laboratory reports are not included, one can not determine at which location(s) the hit occurred. This is important to know, since if the hits all occur in only a few locations, then perhaps these locations are not suitable as background determination locations and should be deleted from the background value determinations. (The assumption is that based on the known use of the facility. Many of the organic compounds for which the samples were analyzed should be nondetectable.) Therefore, we are requesting that where there are hits of organic compounds (other than pesticides) in the background samples, the sample location be identified, and that any locations which appear to be outliers be investigated, and deleted from the background determination, where justified. Resolution of this issue should shed some light on the high background values addresses in Comment III.A.*

*Two other items need explanation. In the frequency of detection columns, the sum of the number of detects and nondetects is not the same number for all constituents. (For example, in Table 3.14, the sum of the detects and nondetects for Selenium is 7, for Barium is 9, for Benzo(A)anthracene is 6, etc;) Why is this so? One would expect that the sum should be a constant, as the same number of samples should have been analyzed for each constituent.*

#### **Response**

The statistical analysis performed for the Final Phase I RFI Report has been revised. Statistical outliers were assessed and removed from background calculations when appropriate.

The discrepancies noted in Table 3.14 (7 total samples for selenium and 9 total samples for barium), arose because of misidentified duplicate samples in the database. The data presented in the draft report were preliminary. The duplicate samples have been identified for the final validated data, and Table 3.14 (Table 3.16 in the final report) has been revised accordingly.

#### **Comment D**

*In Section 2.2.1 of Appendix M, a statement is made that, "The data are assumed to be normally distributed if about two-thirds of all the measurements will fall within one standard deviation of the mean." This is a necessary, but not sufficient condition. In addition, one questions the validity of the use of histograms to determine distributions, when only a few samples define the distribution, and most of the samples are nondetects (such as the organics in soils). The report needs to justify the use of the histogram method in these situations.*

#### **Response**

As indicated in Section 2.2.1, the analytical results plotted on the histogram were assessed to be normally distributed if, based on visual inspection, about two thirds of the analytical results plotted on each respective histogram appeared to fall within one standard deviation of the mean.

Histograms are very useful in graphical assessment of normality as well as graphical presentation of the mean and range for concentration values. The histogram is one of three methods used to assess normality. Probability plots and the Shapiro-Wilk test were also used to assess normality of each population. Risk Assessment Guidance for Superfund (RAGS) states that data are assumed to be normally distributed unless there is appropriate evidence that they are not normally distributed.

#### **Comment E**

*In Section 2.3 of Appendix M, the report states that, "If the data were non-parametric or had greater than 50 percent (nondetects?), the nondetects were used at face value (MRL), and the nonparametric UTL was calculated." In Section 2.4, the report states that, "The non-parametric UTL was calculated as the maximum detected value." These statements are contradictory. The second one effectively ignores the nondetects in determining background, and is especially troublesome with regard to the organic constituent background levels.*

#### **Response**

The statements are not contradictory. The first statement refers to the treatment of nondetects in the data sets. The second statement refers to the methodology used to calculate the non-parametric UTL.

The nonparametric UTL is calculated as the largest detected value or method reporting limit if no detections were reported (EPA, 1992). This approach is the recommended approach for populations that do not approximate a normal distribution. Using the largest value for the UTL for a population means that samples from that population are likely to be below the UTL. The probability that the data are below the UTL depends on the number of samples within the population (EPA, 1992). Although the nonparametric UTL effectively ignores the nondetects within the sample population, a value is needed to compare to the investigative sites to assess contamination, and the nonparametric UTL is the recommended approach (EPA, 1992). To address the concern of using the maximum value for the UTL, Harding Lawson Associates (HLA) identified and removed outliers before performing the statistical analyses on the final validated data.

#### **Comment F**

*Section 3.4.2.1 of the report discussed analytes in the background surface soil. It identifies the occurrence of PAHs which are above detection limits. It then hypothesizes several possible reasons why they occurred, all being the result of human activity. Consideration must be given to the possibility that they are outliers, and that they should not be used in the background determination. They could have been the result of laboratory errors, sampling problems, or poor locations being used for background sampling. Not enough information is provided in the report for the reader to make this determination. The data needs to be reviewed, and any such outliers which indicate bad locations or sampling/analysis problems need to be eliminated from the background determination.*

*Two similarly related problems are found for background water concentrations (Section 3.4.2.3), where vinyl chloride was detected in a well presumed to be affected by the former sanitary landfill, and in sediment samples (Section 3.4.2.4) where a number of organic constituents were encountered downstream of a landfill. These are examples where one should consider eliminating the results from the background determination because of possible contamination from facility activities.*

#### **Response**

The statistical analysis presented in Appendix M of the Final Phase I RFI Report has been revised. Background analytical results were screened for the presence of outliers in Appendix M, and analytical results estimated to be outliers were not used during the evaluation of background.

Vinyl chloride analytical results for the groundwater collected from monitoring well MW20 were removed on the basis of the evaluation of outliers from the data used to assess background groundwater concentrations.

The analytical results, "Analyte Concentrations in Basewide Sediment" are discussed in Section 3.4.2.4 in the draft report. Samples discussed in this section were not collected from locations that were considered representative of background because of the possible influence on analyte concentrations in sediment samples from runoff and other non-identified sources. The discussion of the basewide sediment analytical results has been moved to Section 4.8 in the final report and is intended to convey information regarding the relative distribution of target analytes detected at the respective sediment sample collection locations.

#### **Comment G**

*In Table 3.18, no units are given for the values of constituent concentration in the background sediment samples. Presumably the values are meant to be in mg/kg.*



**Response**

Units of mg/kg are correct for expressing constituent concentrations in sediment. Table 3.18 has been revised accordingly. This table has been moved to Section 4.0 of the Final Phase I RFI Report and has been renumbered Table 4.28.

**IV. RISK ASSESSMENT AND EVALUATION****Comment A**

*While risk assessment, target restoration goals, and other related items are normally addressed and evaluated by the U.S. EPA's risk assessment experts as part of the corrective measures study review, they can be reviewed if submitted in a RFI report. However, it was decided not to submit this draft RFI report to them at this time for their review. The primary reason for this decision is that the report is neither complete nor adequate in terms of its presentation of the RFI results. The risk assessment personnel at the U.S. EPA have a heavy workload with other projects, so that reviewing incomplete reports would not be a priority for them. As a result, only a limited review of the risk assessment issues was done by the RCRA corrective action project manager. Thus, the facility must realize that further review of these aspects of the report may occur in the future.*

**Response**

The comment is noted.

**Comment B**

*In Section 3.4.3.3, action levels, as identified in the U.S. EPA proposed corrective action regulations are discussed. There are some misconceptions about this subject. My comments are as follows:*

1. *It is true that action levels are not cleanup levels.*
2. *The U.S. EPA does not make a blanket statement that action levels are protective of human health and the environment. Action levels were put in the proposed rule solely as examples of levels of hazardous constituents which could trigger a corrective measures study if they were exceeded at any sampling point. To determine what is protective at an individual site requires a site-specific risk analysis.*
3. *The U.S. EPA may require a corrective measures study even if all sample results are below the action levels presented in the proposed rule. Site-specific issues, such as proposed usage and exposed population, can justify such a study.*
4. *Not much weight should be given to the action levels as comparisons to target restoration goals identified in the report, for the above reasons.*

**Response**

The comments are noted

**Comment C**

*Section 3.4.3 states that action levels for noncarcinogens are based on a "hazard index". However, there is no discussion of the hazard index. It needs to be defined, and a discussion of how it was used in the context of this report should be included.*

**Response**

Section 3.4.3.3 has been revised to clarify the definition of the hazard index. A more complete discussion of the hazard index has been added to Section 3.4.4.1 (Screening Risk Evaluation) that addresses how the hazard index is used in the evaluation of the individual SWMUs.

**Comment D**

*In Section 3.4.4.1, the report states that, "It was conservatively assumed that the future land use of all areas of FBH following base closure would be residential." It is also stated that the cumulative risk in surface soil of less than  $1 \times 10^{-6}$  is acceptable for residential scenarios. However, the report also states that if cumulative risk at a SWMU does not exceed  $1 \times 10^{-4}$ , then the unit was recommended for no further action. Please clarify this apparent discrepancy.*

**Response**

The Army cannot find the statement that says, "that if the cumulative risk does not exceed  $1 \times 10^{-4}$ , the unit was recommended for no further action. Section 3.4.4.1. text has been revised to indicate that if the cumulative cancer risk exceeded  $1 \times 10^{-5}$  for subsurface soil or  $1 \times 10^{-6}$  for surface soil, the site was recommended for inclusion in the Phase II RFI program. The evaluation criteria for inclusion of a site in the Phase II RFI program are as follows:

- Surface Soil - Carcinogenic risk greater than  $1 \times 10^{-6}$  or a hazard index of greater than 1.0
- Subsurface Soil - Carcinogenic risk greater than  $1 \times 10^{-5}$  or a hazard index of greater than 2.0

**Comment E**

*On page 3-41 of Section 3.4.4.1, it is stated that a basewide PAH evaluation was not conducted, as the background concentration would "present a potential risk." This perception should be reviewed in light of the discussion about outlier elimination in comment III.F.*

*In the same paragraph, the statement is made that, "When the background concentrations were subtracted from the SWMU-related concentrations and resulting concentrations did not exceed TRGs, the specific environmental medium or SWMU as a whole was recommended for no further action." How is it justifiable to subtract background concentrations out? In terms of risk, a receptor experiences the total exposure, not the total minus the background.*

**Response**

The statistical analysis of background data has been revised to include outlier analysis. Soil samples containing high PAH concentrations were removed from the background calculations.

A receptor would experience the total exposure at a site, and not just the total minus the background. The risk due to the assumed background concentration was estimated to aid in the identification of what would be considered the strict site-activity-related chemical concentrations. RAGS (EPA, 1989) states that the background risk may be an important site characteristic. The simplest way to assess

the contribution of background is to compare the background concentration to the total concentration. The incremental chemical concentration was then compared to the TRG, which was determined by using the conservative exposure assumptions presented in RAGS Part B. The objective of a corrective measure is to ensure that sources or source areas are not contributing unacceptable risks to humans or the environment. Therefore, a method must be used that evaluates the incremental risk of the source. If the incremental risk is unacceptable, some corrective measure would be considered. If the site-related concentration was less than the conservative TRG, no further action was recommended. Additional rationale for this conclusion is that if a complete baseline risk assessment were to be conducted for these SWMUs, the values for specific exposure parameters would be refined to site-specific conditions, which would result in even lower risks.

#### **Comment F**

*On page 3-41 (Section 3.4.4.1), risk as it applies to subsurface soils is discussed. Averages of constituents identified as "risk drivers" over the SWMU-wide samples are taken, and then the resultant risk is estimated. It appears, but is not explicitly stated, that the first set of tables in Appendix I present the results of these calculations. There are several concerns about this method of approach:*

1. *On what basis are the "risk drivers" chosen? Why are not all of the constituents utilized?*
2. *Why are not all of the "risk drivers" used in calculating the cumulative risk? What is the meaning of the term "NA" in the risk column? It appears that this term might mean "not available". If this is the case, then how can just ignoring the contribution to risk from these constituents be justified. More will be said in Comment IV.G about constituents for which risk levels were not identified.*

#### **Response**

The discussion of the identification of "risk drivers" was incomplete. For those SWMUs where high risks were estimated (i.e., were "risk drivers"), average concentrations of the risk drivers were calculated and risks were reestimated. These calculations are presented in Appendix I. Risk drivers were identified by noting which chemicals had individual carcinogenic risks of  $1 \times 10^{-6}$  or greater or a hazard index of 1.0 or greater. Average chemical concentrations were then calculated for those chemicals. Chemicals with carcinogenic risks less than  $1 \times 10^{-6}$  or a hazard index of less than 1 (as calculated with the maximum detected concentration) were not used in the calculation because they would not contribute significantly to the total risks when risk was calculated using the average concentration.

When there was no average concentration input into the calculation spreadsheets for the entire list of metals or organic compounds, the spreadsheet printed an "NA" (not applicable) in the hazard index and/or the carcinogenic risk column. This means that the chemical was not a risk driver at the site, and was not included (applied) to the risk calculation.

#### **Comment G**

*Table 3.24 identifies proposed SWMU action levels. The source of this information is not identified, except for those constituents in water which have established MCLs. It is important that the source(s) be identified.*

*A large number of constituents are identified as not having established action levels, including all of the PAHs. The U.S. EPA believes that much of the information is available that would allow the action*

*levels to be calculated. Region 5 has incorporated (after verification) a series of data quality levels developed by Region 9 for use in QAPPs. These levels are based on a residential scenario with regard to risk. It includes most of the constituents designated as "NE" in the RFI report. We suggest that the sources utilized to obtain the data quality levels can be used to obtain action levels. A copy of the data quality level document was given to Bill Nelson of AEC. We would also suggest comparing the values are obtained for action levels with the DQL values themselves to see if they are both in the same ballpark. (Note that the DQL documents specifies a number of caveats regarding their use).*

### **Response**

The source of the proposed SWMU action levels is the proposed EPA regulation for SWMU corrective action (55 Federal Register 30798). This reference will be added to Table 3.25.

Because the proposed regulation does not list action levels for many chemical constituents, including PAHs, the abbreviation NE (not established) was used. However, TRGs for PAHs were developed for use in the screening risk evaluation by using the "Provisional Guidance on Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons" (EPA, July 1993). TRGs used in the screening risk evaluation are provided in Tables 3.22 and 3.23.

A comparison of the TRGs for PAHs (Table 3.25) with the draft DQLs shows that the TRGs and DQLs do not always match well. For benzo(a)pyrene, the TRG is an order of magnitude lower than the DQL; however, for chrysene, the TRG is two orders of magnitude higher than the DQL. In general, however, the TRGs and DQLs agree within an order of magnitude. (DQLs were not added to the tables in this section because of the caveats identified by EPA.)

### **Comment H**

*Tables 3.25 and 3.26 identify target remediation goals. A large number of constituents do not have numerical values, but are designated as "not applicable". What does this mean? There should be target restoration goals for all hazardous constituents; none should be ignored. If this designation was applied because no information was available with regard to risk, then the DQL data may be of some help in determining these values.*

### **Response**

The designation of NA (not applicable), as used in Tables 3.25 and 3.26, indicates that either the oral reference dose (RfD) and/or the oral slope factor for a specific chemical is not available. Therefore, a TRG corresponding to a hazard index of 1.0 (for noncarcinogens) and/or a target restoration goal corresponding to a  $1 \times 10^{-6}$  risk (for carcinogens) cannot be calculated.

Thirteen chemicals have neither an oral RfD nor an oral slope factor available. Therefore, TRGs for these chemicals are not presented. The 13 chemicals include 4 inorganics (aluminum, cobalt, lead, and magnesium), 3 pesticides (d-benzene hexachloride, carbazole, and dichloroprop), and 6 PAHs [acenaphthylene, benzo(g,h,i)perylene, dibenzofuran, 2-methylnaphthalene, naphthalene, and phenanthrene].

Lead is a special case and will be evaluated on a case-by-case basis. The SWMUs with lead contamination are FBH 22, 23, and 24, the firing ranges. Additional risk assessment as part of the screening risk evaluation is not considered necessary for these SWMUs. However, the corrective measures studies for the SWMUs may include, as necessary, additional risk assessment of lead using the latest EPA lead model, "Integrated Exposure Uptake Biokinetic Model for Lead in Children (IEUBK)," Version 0.99D, February 1994.

The approach taken in the derivation of the risk-based TRGs is in agreement with EPA RAGS. The Army would appreciate any interim guidance and supporting documentation from the EPA regarding unpublished RfDs or slope factors the EPA would recommend using for the evaluation of the other 12 constituents.

DQLs were not used in determining target remediation goals because of the caveats applied by EPA to their use.

## V. INDIVIDUAL SOLID WASTE MANAGEMENT UNIT (SWMU) COMMENTS

### Comment A

*The RCRA permit for Fort Benjamin Harrison requires the facility to perform a RFI for 7 SWMUs to determine whether or not corrective action is necessary. With respect to the addition 17 sites investigated and included in the report, the RCRA permitting program has made a determination, based on the data presented, as to whether or not each one is a SWMU in the regulatory definition sense, and whether it poses a significant enough potential to warrant modifying the RCRA permit to include it in the RFI. If the unit was determined not to be a SWMU requiring further action, it should be reviewed as part of the overall base closure activity under the Environmental Investigation, and not as a RCRA regulated unit under the RFI.*

### Response

As requested, those sites not identified as SWMUs in the RCRA permit have been removed from the RFI Final Phase I Report. Sites removed from the RFI Final Phase I Report have been transferred to the state-lead Environmental Investigation (EI) Report. Information on Building 705 has been added to the report as Appendix K.

### Comment B - SWMUs Identified in the Facility's RCRA Permit

1. FBH2 - Maintenance Shop and POL Waste Storage - Bldg 127. Two former POL storage sites existed at this building. Only one was sampled. There is no reason given why the second one was not investigated. This second unit should also be addressed.
2. FBH6 - Heavy Equipment Maintenance Building and POL Storage - Bldg. 422. This SWMU was required to be investigated under the provisions of the RCRA permit. The report either does not address this unit, or it is addressed, but is identified in some other way. This needs to be clarified.
3. FBH7 - Auto Shop Waste Storage - Bldg. 705. This unit is identified as an underground storage tank. It is not addressed in the RFI report. This unit is required to be investigated under the terms of the permit. (It appears that it may have been investigated, but a State authority.)
4. FBH8 - Former Drum Storage Area Near Bldg. 45. No comments.
5. FBH10 - Sanitary Landfill on West Side of Base. This unit was required to be in the RFI, however it is not addressed. It appears that it may have been investigated, but only put in the State authority report.
6. FBH11 - Fire Training Area in Abandoned Sewage Treatment Plant. In Section 4.3.2.1, the report states that a geophysical survey was taken in the area of the former sludge drying beds, and that, "Numerous isolated deposits of buried metal, possibly drums, were also detected."

*However, there appears not to have been any follow up to actually determine what was actually buried there. This needs to be addressed.*

7. FBH17 - Abandoned Incinerator - East Side of Base. An area where, "Numerous localized high amplitude EM anomalies indicative of drums or other metal debris within the upper five feet of the subsurface were detected, ..." during a geophysical survey. There is no indication that any follow up work was done to determine just what was buried there. This needs to be addressed.

## **Response**

SWMU #FBH2: This unit is identified in the RCRA permit for FBH as a petroleum, oils and lubricant (POL) waste storage area. The Phase I RFI investigated the current POL storage area. A former POL storage area was in a location that is currently covered by the eastern service bay. The recommendations for this SWMU have been revised to recommend additional soil sampling to assess the former POL storage area.

SWMU #FBH6: This unit is identified in the RCRA permit for FBH as a POL waste storage area. Soil in the former POL waste storage area was removed and remediated before the beginning of the Phase I RFI. Investigation of the remainder of the site (EI Site 2) was performed under the state-lead EI, and results were included in Section 4.2 of the Draft Phase I EI Report. The investigative results for this site have been moved to Section 4.2 of the Final Phase I RFI Report.

SWMU #FBH7: This unit is identified in the RCRA permit for FBH as an underground waste oil storage tank (UST). The UST was removed and remediated before the beginning of the RFI. Investigation of the remainder of the site (EI Site 1) was performed under the state-lead EI, and results were included in Section 4.1 of the Draft Phase I EI Report. Because the investigation at the site was not related to the former UST, the Army has kept the results in Section 4.1 of the Final Phase I EI Report. A brief summary of the investigation at the site and is included in Section 4.3 of the Final Phase I RFI Report. A copy of Section 4.1 of the Final Phase I EI Report is included in Appendix K of the Final Phase I RFI Report.

SWMU #FBH8: No response is required.

SWMU #FBH10: The former Sanitary Landfill (West) is being addressed under a separate regulatory program. The landfill is in the final stages of fulfilling closure requirements set forth in State of Indiana Rule 329, IAC 2-15, as published in the Indiana Register, Vol. 12, No. 5, February 1, 1989. Two documents describing the landfill closure are as follows:

1. ENTECH, Inc., 1990. Landfill Closure Plan for Louisville District Corps of Engineers, Project No. DACA27-88-D-0025, Fort Benjamin Harrison, Marion County, Indiana. Revised Final Submittal, July 30.
2. ENTECH, Inc., 1993. Landfill Closure/Post Closure Plan for Fort Benjamin Harrison, Marion County, Indiana. Prepared for Louisville District Corps of Engineers, Project No. DACA27-88-D-0025, February 2.

SWMU #FBH11: Section 4.6 of the Final Phase I RFI Report has been reused to recommend shallow trenching or excavation in locations where high amplitude electromagnetic anomalies were found.

SWMU #FBH17: Section 4.7 of the Final Phase I RFI Report has been revised to recommend shallow trenching or excavation in locations where high amplitude electromagnetic anomalies were found.

**Comment C - Potential SWMU Areas not Addressed in the RCRA Permit**

1. *On the basis of the information provided, the following units and areas of concern do not meet the regulatory definition of a SWMU under RCRA. They should be addressed under the general base closure authorities.*

*FBH18 - Pesticides Mixing and Storage Area - Building 27.*

*FBH19 - Pesticides Mixing and Storage Areas - Building 514.*

*FBH20 - Pesticides Mixing and Storage Areas - Building 604 and 605.*

*FBH21 - Pesticides Mixing and Storage Areas - Golf Course Pesticide Mixing Area - Building 674.*

*FBH22 through FBH24 - Small arms ranges (active). (These units have been determined by the Court to not be SWMUs until after they have become inactive.*

*FBH25a through FBH25k - Historic Military Sites*

*FBH26 - Former Sewage Treatment Plant west of Building 674.*

*FBH28 - Wash Racks, Grease racks, Oil/Water Separators.*

*FBH29 - Patriotic SWMU.*

**Response**

All sites listed in this group of comments have been moved to the Final EI Report.





Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**RESPONSES TO U.S. DEPARTMENT OF THE ARMY COMMENTS REGARDING  
THE DRAFT PHASE I RCRA FACILITY INVESTIGATION REPORT**



**RESPONSES TO U.S. DEPARTMENT OF THE ARMY COMMENTS  
REGARDING THE DRAFT PHASE I RCRA FACILITY INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA, MAY 4, 1994**

**WATER QUALITY ENGINEERING DIVISION AND TOXICOLOGY DIVISION**

**SPECIFIC COMMENTS**

**Comment No. 1 - page 2-7, chapter 2.1.3.2, Groundwater, last sentence**

*The name of this Agency is the U.S. Army Environmental Hygiene Agency.*

*Recommendation: Add the word "Hygiene" between the words "Environmental" and "Agency".*

**Response**

The text has been revised as recommended.

**Comment No. 2 - pages 2-7 and 2-8, Chapter 2.1.3.3, Water Supply**

*Figure 2-4 does not show the locations of the seven water-supply wells. This figure only shows the locations of the 29 ground-water monitoring wells, and the Fort Benjamin Harrison well field.*

*Recommendation: Adjust the figure to show the locations of the seven individual water-supply wells. Another option would be to place the locations of these water-supply wells on Plate 1, Water Level Contour Map.*

**Response**

Review of Fort Benjamin Harrison (FBH) records (Raw Water Supply Main Phase I, Title sheet and key map, Directorate of Engineering and Housing, FBH, 30 June 1982) indicates that there are six wells in the water-supply well field (rather than seven as identified in the text). Wells No. 6, 7, and 8 are not in use and have no attached buildings. Wells No. 9, 10, and 11 are in use and are associated with buildings 516, 528, and 541, respectively. The locations of these wells have been added to Figure 2.4, and the text has been revised to indicate that the FBH well field consists of six onpost water-supply wells.

**Comment No. 3 - page 2-14 and Table 2-3, page 9 of 11, chapter 2.3. Current Operations, Hawley Army Hospital and the Dental Clinic (Bldg 300)**

*There are no activities recommended in the Enhanced PA, and nothing under the column headed RF/EI Activity on Table 2-3.*

*Recommendations: Add some word(s) for clarity (i.e., none) in the appropriate columns. Do not leave the columns blank.*

**Response**

The hospital and the two clinics were included as a unit in this table, and the activity recommended in the Enhanced Preliminary Assessment (PA) (Weston, 1992) applies to all three facilities. The words "Same as above" have been added to indicate this information.

**Comment No. 4 - page 2-20, Section 2.5, Summary of Previous Investigations, 4th paragraph**

*"Localized degradation was noted at certain well locations, as indicated by the periodic sampling events." Degradation of what?*

**Recommendation:** *Explain what was degraded. The sentence is not clear.*

**Response**

This sentence was quoted from the Enhanced PA (Weston, 1992). The use of the word "degradation" was vague. The sentence has been changed to "Detectable VOC concentrations were noted at certain well locations immediately downgradient from the landfills as indicated by the periodic sampling events. In particular, the presence of vinyl chloride concentration exceeding the MCL was confirmed for Well MW20."

**Comment No. 5 - Figure 3.3 - Section 3.0, Flow Chart for Statistical Analysis of Background Analytical Results**

*This figure implies that lognormally distributed data are transformed, the Upper Tolerance Limit (UTL) is calculated, then this value is "untransformed". It is unclear in Appendix M if this is the case. However that procedure is not valid. As highlighted in "Supplemental Guidance to RAGS: Calculating the Concentration Term", estimates of the mean of lognormally transformed data are not mathematically equivalent to the antilog, of estimates of the mean of a transformed data set.*

**Recommendation:** *Evaluate UTL calculations on lognormally distributed data to determine mathematical and statistical accuracy.*

**Response**

The procedure used to calculate the upper tolerance limit (UTL) for lognormally distributed data is correct. The UTL is calculated on the basis of a normal distribution. Lognormally distributed data approximate a normal distribution when the data are log-transformed. The UTL is then calculated using the log-transformed data (for those populations assessed as lognormally distributed). Once the UTL is calculated, it can be expressed in logarithmic terms or its antilog; as long as the comparisons are consistent. The antilog is used because it is more familiar to most readers. The reviewer is correct in that a UTL calculated in this manner is not equivalent to a UTL calculated from the some data set without logarithmically transforming the data. The correct approach depends on the distribution of the data. Log-transformation was only applied to data assessed to be lognormally distributed.

**Comment No. 6 - page 4-1, Section 4.1, SWMU #FBH2**

*This section investigates a "relatively new" POL storage pad, but dismissed an old storage pad which is covered by recent construction. If this new pad warrants investigation, then it seems logical that some type of sampling should be performed to verify the old pad was appropriately abandoned.*

**Recommendation:** *Consider surface and/or subsurface sampling the limits of recent construction to determine the previous POL storage area is not contributing to contamination or provide addition text explaining why it is not consider a potential contamination source.*

## Response

The recommendations for Solid Waste Management Unit (SWMU) #FBH2 (Section 4.1.6) have been revised to include soil sampling in the vicinity of the old petroleum, oils, and lubricants (POL) storage pad.

## Comment No. 7 - page 4-14, 4-15, and page 4-18, Section 4.2.4, Organic Compounds, last paragraph, and Conclusions, 5th conclusion

*"The number of both metals and organic compounds detected at concentrations that exceed background was greatest in samples collected from sampling location SM008SB007. Soil boring SM008SB007 is located approximately 25 feet north of an unidentified buried object. This object may have influenced the concentrations of analyses detected in the subsurface soil samples collected from soil boring SM008SB007."*

**Recommendation:** Carefully remove the unidentified buried object from the ground, and identify it to see why soil sample SM008SB007 was affected by it. Remove the soil around the object, and collect additional samples of the soil for chemical analyses. This should remove this particular source of contamination. If this object contains hazardous waste, then properly dispose of the object and any associated contaminated soil in an approved hazardous waste landfill..

## Response

The analytical results for SWMU #FBH8 were reevaluated using validated data and a revised statistical analysis (Section 4.4.2). As a result, soil boring SM008SB007 is no longer identified as having the greatest number of analytes exceeding background. Therefore, further evaluation of the unidentified buried object is not currently warranted.

## Comment No. 8 - page 4-19, Section 4.3, SWMU #FBH11: Former Sewage Treatment Plant, Building 810

*"It is unknown whether the sludge drying beds at the site have concrete bottoms".*

**Recommendation:** It should be an easy, cost effective procedure to dig with a shovel or carefully with a backhoe to see if the bottom of the sludge drying bed is or is not constructed with a concrete bottom. The sludge drying bed shouldn't be too deep.

## Response

The statement "It is unknown whether the sludge drying beds at the site have concrete bottoms" was written prior to conducting the Phase I field investigations. Auger refusal during drilling at the site Section 4.6.1.3 (Section 4.3.1.3 in the Draft Phase I RFI Report) suggests that the sludge drying beds have concrete floors. Excavation to confirm the presence of a concrete floor is not currently planned. The text in Section 4.6 (Section 4.3 in the Draft Phase I RFI Report) has been revised to correct the previous statement.

**GENERAL COMMENTS**

**Comment No. 9**

*The statistical analyses presented in the report are excellent. In addition, the conclusion based on the background data are appropriately conservative yet fair. However, the authors may wish to consider comparing individual site sampling data values to the ninety-fifth percentile of the background population distribution rather than the upper tolerance limit (UTL). The UTL is an estimate (albeit a conservative one) of the population mean of the background. By definition, fifty percent of the samples collected would be expected to exceed the population mean. Comparison to the 95 percentile of the background population would more accurately determine if a sample in fact exceeds expected background concentrations.*

**Response**

The UTL is not an estimate of the mean of the background data. The UTL is based on the mean and standard deviation, but is the upper limit for a range that contains a certain percentage of the population. For example, the upper 95 percent tolerance limit at 95 percent confidence (the values used in this investigation) means that one has a confidence level of 95 percent that 95 percent of the background observations are below the UTL.

**Comment No. 10**

*The presentation of installation-wide sediment and surface water sampling in the background section of the report is confusing. Although presented in the background section, it is later specified that the data is used to assess FBH overall impacts on surface water quality. Other assessment of site impacts are presented Section 4.0. This section needs to be moved out of the background data discussion and expanded to clearly describe its purpose and conclusions.*

**Response**

The section on surface water and sediment has been moved out of the background section in Section 3.2 and retitled "Basewide Surface-Water and Sediment Evaluation." The text is now included in Section 4.8 of the final Phase I Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report. The purpose and conclusions of the study have been expanded, as requested.

**Comment No. 11**

*The organization of the report makes evaluation of each SWMU difficult. Specifically, the text of each analysis refers to a table summarizing RFI activity in Section 3, background concentrations tabulated in Section 3, site data tabulated at the end of Section 4, site maps at the end of Section 4, Statistics presented in Appendix M, and risk evaluation presented in Appendix I. While consolidation of methodologies is advantageous to the reviewer, site specific information needs to be grouped with the site discussion so that all information can be digested. Consider placing the RFI activity summary, site specific data, site maps, and risk evaluation adjacent to the discussion in the report text.*

**Response**

Although the difficulty in digesting all the mentioned text, tables, and figures is understood and appreciated, the difficulties that would be involved in splitting up the appendixes, tables, and figures and placing them in the corresponding text sections would be significant. In addition, it is uncertain

that the report would be any less complex. Therefore, the structure of the report has not been changed.

**Comment No. 12**

*Although the objective of this document is to screen for potential hazards, the basis for the preliminary risk calculation should be described. Include reference values and slope factors used in determining preliminary risk values.*

**Response**

Reference dose values and slope factors used in determining preliminary risk values are included in the draft Phase I RFI Report in Tables 3.25 and 3.26.

**Comment No. 13**

*A preliminary screen using the hazard quotient/hazard indices approach can be accomplished using the current soil and water data. For example, compare soil data to toxicology data for terrestrial species like earthworms. The same could be done with water and sediment data comparing to toxicology values for aquatic organisms. This would narrow the scope for a complete ecological risk assessment.*

**Response**

It is agreed that the hazard quotient/hazard indices approach could have been used for the screening hazard evaluation of the draft Phase I RFI and Environmental Investigation (EI) reports to assess potential impacts of sites to ecological receptors. However, use of the more detailed hazard quotient/hazard indices approach is more appropriate in a baseline ecological risk assessment to evaluate potential impacts to specific terrestrial and aquatic indicator plants and animals.

The methodology that was selected for the screening hazard evaluation involved comparing the predicted amount of chemical ingested in soil to concentrations known to adversely affect small mammals (i.e., rats and mice). This methodology was used because toxicological data for rats and mice are readily available for a wide variety of chemicals, including those detected at FBH RFI and EI sites. Chemical toxicological data for earthworms are more limited; therefore, a hazard quotient approach using earthworms could only be used to evaluate some, but not all, of the chemicals detected at the sites.

Similarly, the hazard quotient approach could also have been used in the screening hazard evaluation for aquatic organisms. However, the comparison of chemical concentrations in investigative surface-water samples to federal ambient water quality criteria (AWQC) is a more commonly used screening method to evaluate the potential for adverse impacts to aquatic systems. Because there is still much debate as to the appropriate application of modifying factors, uncertainty factors, and other issues associated with the hazard quotient method, the AWQC comparison was considered the most defensible screening method for aquatic receptors.

**U.S. ARMY INSTALLATION MANAGEMENT COMMAND**

**SPECIFIC COMMENTS**

**Page 2-13, last paragraph, Section 2.2.2**

*The last sentence states, "the possibility of registering several other buildings at FBH." The nomination for establishing a historic district at FBH (inclusion in the National Register of Historic Places) has already gone forward to the Department of the Interior from the Office of the Deputy Secretary of the Army (Environment, Safety and Occupational Health). The historic district includes primarily the Lawton Loop and Sergeants' Row housing areas (including 75 buildings (19 noncontributing buildings), 1 site (1 noncontributing site), and 3 structures (3 noncontributing structures)). Mr. David Guldenzoph, AFIM-AEC-EC, 410-671-1265, can provide an update of the status of this nomination.*

**Response**

The text in Section 2.2.2 has been revised to include the above information.

**Page 2-16, 2d paragraph, last sentence**

*Last sentence states closure is expected by 30 Sep 97. Closure is expected by 30 Sep 96 when caretaker operations will begin.*

**Response**

The text has been revised as requested.



**USAEC PROJECT GEOLOGIST**

**SPECIFIC COMMENTS:**

**Page 3-10, third paragraph**

*Designate the continuously sampled boring and the depth to which it was drilled.*

**Response**

The continuously sampled boring was SMBKGSB001, which was drilled to a total depth of 14 feet. The text in Section 3.2.13 has been revised to include this information.

**Page 3-11, fourth paragraph**

*Should read - A total of seven background wells... In the second sentence insert 'of these' after Five.*

**Response**

The text has been clarified as requested.

**Page 3-45, last paragraph**

*Due to the lack of quality of the previous boring logs, it is recommended that a downhole geophysical suite be considered to enhance the stratigraphic correlation of the shallow aquifer(s). A Gamma-ray and a resistivity log run would be appropriate for each well on site.*

**Response**

HLA agrees that a downhole geophysical suite could be used to evaluate borehole stratigraphy and assist in correlation. However, two factors could limit its usefulness: (1) the limited depth of the wells, combined with a reduction in coverage due to the length of the logging tools (2 to 5 feet), and (2) the requirement for a fluid-filled hole to run a resistivity log. An electromagnetic (EM) downhole tool would allow a greater depth coverage than a resistivity tool because a resistivity tool requires a fluid-filled borehole and an EM tool does not. Considering the limitations involved and the limited amount of information to be gained, the Army does not plan to log the wells in the shallow aquifer.

**Page 3-48, line four**

*The statement that the reason for the rising of the initial groundwater in the borings is because the clays are saturated probably is not the case. It is more likely that the shallow aquifer(s) being partially confined is a more plausible scenario. Your previous sentence tends to support my case.*

**Response**

An additional paragraph was added to Section 3.6 and other text was changed to clarify the hydrologic conditions found at FBH during Phase I investigations. The hydrologic conditions encountered during the Phase I RFI and EI drilling activities do not indicate that the shallow aquifer is confined. Evidence that a continuous unconfined flow system exists at FBH is apparent from the four monitoring wells installed in silty clays at EI Site 1. The water table was not recognized at the EI Site 1 soil borings during drilling and the silty clays did not appear to be saturated. However,

after the monitoring wells were installed, the water levels rose and stabilized in these wells, which were screened in the silty clays, at levels consistent with the basewide water table at FBH (Plate 1). The silty clays are expected to be of relatively lower permeability than the sands and gravels such that groundwater flow is restricted through the clays; however, a limited amount of groundwater does move through the clays.

**Page 3-48, line six**

*The discussion of the vertical gradient within the individual well clusters needs to be clarified.*

**Response**

The text in Section 3.6 has been revised. No true well clusters (collocated wells) were installed during the Phase I EI/RFI. Water-level data necessary to assess vertical gradients are not available.

**Page 4-11**

*Shouldn't the well abandonment procedures used be at least be in the appendix or in a discussion?*

**Response**

The procedures used for well abandonment at SWMU #FBH8 have been added to the discussion in Section 4.4.1.3.

**Sections 4.2 and 4.3**

*Wouldn't isopleths be appropriate in these two areas?*

**Response**

HLA does not believe that isopleths for SWMUs #FBH8 and FBH11 are necessary. However, a point plot map showing locations of detections and their respective concentrations by depth is included in the final RFI Report. In addition, an isopleth is not considered appropriate for SWMU #FBH11 because the site is heterogeneous. The former trickling filters, sludge drying beds, sedimentation tanks, and the areas between these features are all separate units with their own characteristics. HLA believes that point plots of detections at this SWMU provide the most appropriate basis for evaluation.

Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
REGARDING THE DRAFT PHASE I ENVIRONMENTAL INVESTIGATION REPORT**



**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
REGARDING THE DRAFT PHASE I ENVIRONMENTAL INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA, MAY 4, 1994**

**GENERAL COMMENTS**

**Comment No. 1**

*The transmittal letter of the EI report from Gerald L. Zimpfer of HLA to William Nelson, Contracting Officer's Representative, U.S. Army Environmental Center, dated May 5, 1994, describes the data used in the EI report as preliminary. Data validation is noted as incomplete.*

*Could findings of the data validation effort change the quality and usefulness of some key data and ultimately affect the recommendations provided in the report?*

**Response**

It is possible that the findings of data validation could place qualifiers on some data that may influence some recommendations. However, data validation has now been completed and the validated data are included in Appendix D to the Final Phase I EI Report. Statistical analysis and risk calculations have been reworked with the validated data and conclusions and recommendations have been revised, where appropriate.

**Comment No. 2**

*The stated EI Purpose and Objectives (Section 1.0) do not appear to be supported by the body of the report, namely, Sections 2.0 through 5.0. The report suggests that the purpose of the EI is to assess the nature and extent of contamination at the FBH site.*

*Would this purpose, specifically the assessment of extent, be more appropriate for the Phase II EI?*

**Response**

Section 1.1 has been revised to clarify that the objectives will be accomplished in a phased approach. The first phase will identify the presence of contamination and provide information on the nature and extent. The objective of Phase II is to more fully characterize the nature and extent where necessary.

**Comment No. 3**

*The term "background" is used several times through the EI report. A number of definitions of this term are provided in the report. For example, background is defined as "undisturbed areas" based upon aerial photograph review and interpretation. Other examples include "areas believed not to have been influenced by past activities,..." and "areas that appeared not to be influenced by past activities."*

*Clarification of this term would permit a consistent understanding of why certain areas of the site were selected for background sample collection.*

## **Response**

Although wording differs slightly in several areas where background locations are discussed, the intent of each background location is the same. Background locations were chosen to assess conditions in water, sediment, or soil that are: (1) not due to past or current Army-related activities, (2) not located at or adjacent to an identified EI or RFI site, (3) not located on a transport pathway from a site, and (4) representative of anthropogenic background levels (chemicals present in the environment due to human-made, non-point sources [e.g., automobiles]). Therefore, locations were selected in areas where no current or past uses by the Army were identified, and are unlikely to be affected by the EI and RFI sites being investigated. The text in Section 3.2.1 has been revised to clarify the background sample location selection criteria.

## **Comment No. 4**

*Analytical data derived from the background samples are used to calculate: (a) Upper Tolerance Limits (UTLs), and (b) Upper Confidence Limits UCLs of the mean for each analyte. The UTLs and UCLs are both referred to as background, although they are significantly different concepts and are applied differently in the report.*

*The "generic" use of the term background presents considerable potential for confusion and inconsistency in the document.*

## **Response**

The 95 percent upper confidence limits (UCLs) were based on guidance in RAGS, and were used to help assess the potential health risk of analytes present in media collected from the FBH investigation locations. The UCL includes chemical concentrations that are considered background and concentrations that are considered related to site sources. The 95 percent upper tolerance limit (UTL) values were used to assess the potential presence of analytes associated with Army activity in media collected from the FBH investigation locations. The UTL for each analyte is calculated so that there is a 95 percent probability that 95 percent of the data distribution will fall below the UTL.

Section 3.4.4.1, Screening Risk Evaluation, has been revised to include an expanded description of the use of UCLs during the Screening Risk Evaluation and to distinguish between the application of the UCL and UTL background concentrations. Sections 3.0 and 4.0 have been revised to incorporate the term "UCL Background" when referring to background concentrations based on the UCL calculations. Where the term "background" is used it refers to UTL background concentrations.

## **Comment No. 5**

*The EI report defines potential chemicals of concern (COCs) as any identified contaminants. The COCs are then carried forward for screening risk evaluation. When the carcinogenic risks and/or hazard index exceeds the respective media risk thresholds, the EI report subtracts the background contribution.*

*Two general comments derive from the foregoing:*

- *The definition of COCs may be too broad and admits compounds such as manganese, an essential nutrient, into the screening risk evaluation process thereby exaggerating the potential site risks. Limiting the COCs to only those exceeding the respective analyte background concentrations may be an appropriate approach.*

- *RAGS required that the amount of risk added by naturally occurring compounds that contribute significantly to the risk evaluation should be evaluated. However, the RAGs definition does not imply the subtraction of the background contribution to reduce the calculated risks.*
- *Why were a Hazard Index of 2 and a carcinogenic risk of  $10^{-5}$  selected for the screening risk assessment? Are these the commonly used values?*

## Response

Manganese and other elements (such as thallium and barium) were included in the screening risk evaluation because the identified SWMU concentrations exceeded the background concentration (determined using the UTL procedure). The UTL concentration is higher than the concentration that would be estimated using the UCL method. However, because the concentrations of these elements are considered to be representative of natural site conditions, additional discussion has been provided in the text to justify their deletion in the estimation of site-related risks.

Although RAGS does not recommend that subtraction of background risks be performed, it does state that background concentrations may present a significant risk. At FBH, many of the concentrations estimated for site-related chemicals are low and approach background concentrations. In these instances, the contribution of background concentrations is a large portion of the total estimated risk. The screening risk evaluation was conducted to identify the incremental risk associated with site-related chemicals. Therefore, it is essential to evaluate the risks from site-related chemical concentrations, which implies that a subtraction be performed. As stated in RAGS, a statistically significant difference between background samples and site-related contamination should not, by itself, trigger a cleanup action, and the toxicological -- rather than simply statistical -- significance of the contamination must be ascertained. The objective of a risk assessment is to determine whether a source results in an incrementally unacceptable risk, and if it does, the source should be considered for remedial action. If the incremental risk from site-related concentrations was less than  $1 \times 10^{-6}$ , it was considered inappropriate to recommend further evaluation.

A hazard index of 2.0 and a carcinogenic risk of  $1 \times 10^{-5}$  were used as the screening risk criteria for subsurface soil in accordance with the assumptions in the Indiana Department of Environmental Management document entitled "Calculation of Tier II Cleanup Goals Based on Human Health Evaluation," dated July 1, 1993. These assumptions state that the potential for contact with subsurface soil is less than the potential for surface soil. The Indiana Cleanup Goals utilize a carcinogenic risk criteria of  $1 \times 10^{-5}$  for nonresidential subsurface soil. Although Indiana does not use a hazard index of 2.0 for subsurface soil, it is believed that this would be a conservative assumption to use in the screening risk evaluation (a factor of 2 increase, compared to a factor of 10 increase for carcinogens), because of limited exposure potential. A site-specific baseline risk assessment would refine the residential exposure parameters and would reduce the estimated hazard index by greater than two fold. The Army clarifies, however, that for surface soil (where the potential for exposure is greater), a carcinogenic risk of  $1 \times 10^{-6}$  and a hazard index of 1.0 were used as screening criteria.

## Comment No. 6

*At a number of the investigated sites, the EI report notes in Section 4.0 that "the soil was of such low permeability that soil-gas samples could not be collected." Was an attempt made to collect these samples, or was a decision made not to proceed based upon observed site conditions?*

*This point is raised because the soil gas survey, as reported, produced little information. For example, only 3 of the proposed 22 soil gas samples were collected at the EI Site 1. Does this limited*

*information satisfy the objectives of the site investigation? Also, what was the linkage between the soil gas sampling and the subsurface soil boring locations?*

**Response**

The soil-gas investigative technique was used to investigate four EI sites. The objective of the soil-gas survey was to provide screening data to evaluate the likelihood of volatile contaminants being present at the sites, to decide whether subsurface soil samples should be collected, and to direct the placement of the soil borings. As indicated, the soil-gas survey was limited by low soil permeability and met with limited success. However, soil-gas sample collection was attempted and no samples could be collected at many planned sampling locations at several EI sites. Section 4.0 figures show only sites where sampling was attempted. Locations where sampling was planned but was not attempted are not shown on these figures. Because of the limited success of the soil-gas surveys, optional subsurface soil samples described in the TSP (HLA, 1993a) were collected at all four sites. At some sites where soil-gas samples could not be collected, a limited number of additional borings may be appropriate, and recommendations have been made to this effect in Sections 4.0 and 5.0, respectively.

**Comment No. 7**

*In Section 4.0 of the report, soil gas and subsurface soil sample analytical results are given. In general, a review of the results revealed little agreement between the constituents identified in the soil gas samples field screening versus those detected in the subsurface samples in the laboratory. For example, at Site E1, the field screening soil gas analysis reported 1,1,1-TCA, PCE, DCA, TCE, toluene and TVH. However, only acetone was detected in the laboratory analysis of the subsurface soil sample. Could this be an indication of issues yet to be resolved by the data validation effort?*

*It is not evident that the EI report addresses the lack of agreement between the soil gas and laboratory analytical results. The text should be expanded to address and clarify this issue.*

**Response**

Sections 4.1.2.1, 4.3.2.1, and 4.4.2.1 of the Final EI Report and Section 4.2.2.1 of the Final RFI Report have been revised to address the lack of agreement between soil-gas and soil data. Soil-gas sampling and analysis provide field or Level II data. This level of data quality is appropriate for the designated data use: identifying potential VOC hot spots. Actual VOC concentrations can then be determined by valid sampling and analysis that is required for representativeness and comparability of data. It is not unusual that these methods yield different results. However, in some cases, the soil-gas detections reported by the soil-gas subcontractor are in the parts per trillion range, which is far smaller than the method reporting limit for volatiles or semivolatiles in soil. This discrepancy is not a data validation issue, but rather is caused by the difference in the two analytical methods and their sensitivities, as well as soil-gas sampling being only a Level II data quality method. For many of the higher soil-gas detections, soil analytical results do provide confirmation. However, at some of the EI sites, a greater number of soil-gas detections occurred in paved areas. This is a fairly common phenomenon, and is believed to result from the trapping of soil volatiles by the asphalt cap in paved areas. In non-paved areas, no such trapping occurs. However, in the paved areas, it is not uncommon in HLA's experience for soil-gas detections to be unsupported by soil sampling and analysis results.



**Comment No. 8**

*The data evaluation and presentation was not easy to read and follow. Plots of results, additional figures and graphics would have been helpful so that it would not be necessary to refer to tables, figures, and text simultaneously. Emphasis of the report would be better place on what contamination was, where it was, why it was there, and what does it mean, rather than on the number of analytes detected above background levels. Figures showing SWMUs, and operations locations would be helpful in understanding the report.*

*Additional discussion of the rationale for individual sampling locations, arrows showing probable direction of groundwater flow, site-specific plotted water levels and potentiometric surfaces, and discussions of the relationship between the current findings and past practices would have assisted in understanding the findings. The soil gas results were not interpreted with regards to evidence of release/no release, and there was no discussion of the relationship between total suspended solids (TSS) and total metals results.*

**Response**

The locations of analytical detections above background have been added to site figures to assist in understanding the chemical distributions by site. Thus, several figures for each EI site have been added to Section 4.0 to illustrate analytical results.

The primary means for assessing contaminated areas is by identifying areas where the background concentrations are exceeded. Once this is accomplished, the reasons for occurrence are discussed and related to known site activities. The nature and extent of contamination in these areas may also be investigated; some of this investigation occurred in Phase I, and some will continue in Phase II.

The locations of EI sites and SWMUs are included in Figure 3.1 and 3.2 of the Final Phase I EI Report.

Rationale for selecting background sampling locations has been included in the Final Phase I EI Report as Tables 3.5. Information on EI site sampling location selection is included in the TSP (HLA, 1993a).

Measured static groundwater elevations, arrows showing interpreted groundwater flow directions, and groundwater analytical detections above background for each site or SWMU have been added to one figure for each site.

Soil-gas results, as stated previously, were used as a screening tool to guide the placement of borings. Soil-gas data do not include information on soil-gas flux. Therefore, these data cannot be used to estimate quantity of contaminant or make a release/no release decision. Soil-gas results were evaluated relative to other soil-gas results to find the most likely locations to encounter soil or water contamination. The soil or water analytical data were then used to assess whether any release had occurred.

Total suspended solids analysis was not performed on groundwater samples. However, the effect of suspended soils on metals analysis can be evaluated by comparing total and dissolved metals concentrations. A comparison of total and dissolved metals concentrations in background groundwater samples (RFI, Appendix K) indicates that metals such as aluminum, chromium, copper, iron, lead, nickel, and zinc occur primarily as suspended solids in the groundwater samples.

## **SPECIFIC COMMENTS**

### **Comment No. 1 - Page 1-1**

*Should the second line of Section 1.1 refer to non-RCRA sites? Also, the purpose of the EI is not to address releases, but to "obtain site-specific information to confirm or deny the presence of". Please clarify.*

#### **Response**

The second line of Section 1.1 does refer to non-RCRA sites, and text has been added to clarify this. The second sentence in this paragraph has been revised as requested.

### **Comment No. 2 - Section 2.1.3.1**

*Where can the surface water and groundwater analytical be found? A table or appendix should be referenced.*

*Where are the geological description of the borings taken during monitoring well installation? Where is this information presented?*

#### **Response**

The surface water and groundwater analytical data are presented in Appendix D and are summarized in tables corresponding to each site where collected in the Final Phase I EI report. Boring logs and well construction diagrams are presented in Appendix H of the Final Phase I EI Report.

### **Comment No. 3 - Section 2.1.3.2**

*Does the groundwater flow direction in the vicinity of the FBH site vary seasonally? If so, is this addressed by the report?*

#### **Response**

The understanding of groundwater flow direction at FBH is based on one round of groundwater level measurement and seasonal variation is currently unknown. Additional water level measurements will be collected during Phase II.

### **Comment No. 4 - Page 2-7**

*It would be useful if the well field locations were shown on a figure. Figure 2-4 does not include supply wells, nor are all items referenced in the text (e.g., old riparian growth, flood plain forests, special plant species locations) shown or called out on the figure.*

#### **Response**

Figure 2.4 shows the location of the FBH water-supply well field in the extreme northeastern corner of the map north of the matchline (A-A'). In response to another comment, the specific locations of the individual water-supply wells have also been added to the figure. The approximate area of Indiana Bat habitat and approximate observed locations of four special plant species have also been added to Figure 2.4.

**Comment No. 5 - Section 2.2.2**

*A figure would be helpful in this case. Why is a military dump a possible archeological site?*

**Response**

Significant historical buildings and archeological sites identified at Fort Benjamin Harrison are shown in Figure 2-8 of the Enhanced PA (Weston, 1992). The historic military sites, including military dump sites, included in the Fort Benjamin Harrison Phase I EI were selected from an inventory of archeological sites at Fort Benjamin Harrison (Table 2.2). These sites are shown in Figure 3.1.

**Comment No. 6 - Table 2.3**

*There are errors in the table. Example - "None, based on recommendations in Enhanced PA" for AREE No. 26 does not match the Enhanced PA recommendation.*

**Response**

The statement quoted from a column in Table 2.3 entitled RFI/EI Activity for AREE No. 26 is correct. However, it may appear to be inconsistent with the information in the column identifying activity recommended in the Enhanced PA. The quoted statement was not intended to indicate that the Enhanced PA did not contain any recommendations for AREE No. 26. (In this case, the Enhanced PA recommended removal of all hazardous constituents and infectious wastes prior to excessing the property.) Rather, it was intended to indicate that no investigative activities were performed during the Phase I RFI and EI performed at FBH, and that no sampling activities were recommended for this AREE in the Enhanced PA. For clarification, that statement in the RFI/EI column has been revised.

**Comment No. 7 - Section 3.1.6**

*Refers to 16 monitoring wells. However, Pages 3-6 and 3-9 indicate that 10 existing wells and 7 new monitoring wells were included in the monitoring program, making 17 wells. Which is correct?*

**Response**

Both numbers regarding monitoring wells are correct. Section 3.1 discusses sampling and analyses performed during the EI. Sixteen groundwater monitoring wells were sampled for the EI. Section 3.2 discusses sampling and analysis performed for the background assessment. Seventeen groundwater monitoring wells were sampled for the background assessment. Please refer to Table 3.4 for a summary of the monitoring wells sampled and the investigation for which they were sampled.

**Comment No. 8 - Section 3.2.1**

*There is no way for the reader to see/determine whether the selected background samples are truly background. One must rely on the writer's interpretation. Additional justification for the background locations should be presented.*

**Response**

Table 3.5 has been added to include descriptions of sampling locations and the rationale for selection. (Also, please see the response to Comment No. 3 in this set of comments).

**Comment No. 9 - Section 3.2.1.3 and 3.4**

*The phrase "Phase I RFI" is used rather than "Phase I EI". This occurs in several places throughout the text. Which is correct?*

**Response**

The reference to "Phase I RFI" is correct in Section 3.2.1.3. Background groundwater monitoring was performed as part of the RFI. The phrase "Phase I EI" should have been used in Section 3.4. Section 3.4 has been revised to use the correct phrase.

**Comment No. 10 - Section 3.4.2**

*The discussion of surface water and sediment samples does not appear to belong here as it is not a background issue. However, the issue of sediment and surface water sampling does not appear to have been adequately addressed in the report. Will surface water and sediment samples be addressed in the EI?*

**Response**

The Army agrees that the assessment of surface water and sediment is not a background issue, but a basewide issue. The assessment of basewide surface water and sediment samples was handled as part of the RFI. The reader is referred to Section 4.8 of the Final Phase I RFI Report for a discussion of results.

**Comment No. 11 - Section 3.4.2.1**

*In order to evaluate the UTL determinations a map of sampling locations needs to be provided and the sample population evaluated through statistical analysis needs to be identified more clearly i.e. only background samples should be included in statistical test to determine background variances.*

**Response**

Figures showing all sample locations were provided in the draft Phase I EI and RFI reports. Background sampling locations are shown in Figure 3.3.

Only those samples designated as background (based on site history, location, etc.) were used in assessing background concentrations in each media. In addition, Dixon's outlier test was used to identify results in the background data set that appeared to be outliers. Once outliers were identified by this test, the results were manually reviewed along with supporting field documentation and validation results to assess the accuracy of Dixon's outlier test. Based on these evaluations, outliers were removed from the background data set and were not used in the calculation of UTL background concentrations.

**Comment No. 12 - Section 3.4.2.1**

*I would like to hear you reasoning as to how PAHs can be considered background. The samples that contained these hits should be shown on a map of the base.*

**Response**

Polynuclear aromatic hydrocarbons (PAHs) may be present in background soil samples collected from urban environments such as those found at FBH. PAHs found in soil samples may result from both anthropogenic and natural sources. Anthropogenic sources of PAH compounds include burning of coal and other fossil fuels, production and use of asphalt hot road mixes, wood preservation and preserved wood products, and automobile and truck exhaust. Natural sources of PAH compounds include burning of grasses and leaves, as in a brush fire (Sims and Overcash, 1983). One or more of the anthropogenic or natural sources of PAH compounds may have occurred at or near the FBH background soil sample collection locations, and may result in background soil concentrations of PAH compounds that are unrelated to specific Army activities. It is also possible that at some of the background sampling locations (particularly surface soil), small flecks of coal may have been contained in the samples. Coal was extensively used at FBH for heating or other purposes, and a remnant of a coal pile or coal-containing fill material may have been encountered during drilling.

**Comment No. 13 - Section 3.4.3.5**

*Please identify what analytical method is referenced in the Indiana Voluntary Cleanup Guidance.*

**Response**

Analytical methods referenced in the Indiana Voluntary Cleanup Guidance (IDEM, 1993) are those contained in EPA SW-846 for GC/MS analyses and Methods for Chemical Analysis of Water and Wastes [EPA-600/4-79-020, March 1983]. Specific referenced analytical methods for groundwater are:

- Method 8270 for semivolatiles
- Method 8240 for volatiles
- Method 8080 for pesticides and PCBs
- Method Series 200 for metals and inorganics

**Comment No. 14 - Page 3-6 1st paragraph**

*Line 2 indicates that shallow groundwater and surface runoff flow to the northwest. Several surface soil samples were collected to the northwest of the FBH site for background assessment. Examples include SMBKGSS005 through SMBKGSS007, and so on. Could the samples collected in this area be affected by surface runoff or shallow groundwater from the site?*

**Response**

The area near the samples SMBKGSS005 and -007 is wooded and the samples were collected in a grassy area near a stream, but above the expected flood level. Therefore, the samples are not thought to have been affected by surface runoff or shallow groundwater.

**Comment No. 15 - Page 3-8, 1st paragraph**

*Were the samples collected below the groundwater table included in the subsurface soil background data pool for UTL and UCL computations? Could these samples bias the statistical evaluation and interpretation of the subsurface soil background data?*

**Response**

Shallow groundwater was encountered at FBH during drilling and collection of background subsurface soil samples. The shallow groundwater conditions precluded the collection of seven subsurface soil samples per boring from above the groundwater table, as described in the TSP (HLA, 1993a). Therefore, eight additional background soil borings, beyond those soil borings specified in the TSP (HLA, 1993a), were drilled so that a sufficient quantity of background subsurface soil samples could be collected and analyzed for statistical purposes. However, because shallow groundwater was so prevalent throughout the base, some subsurface soil samples were collected below the groundwater table to provide background samples at depths similar to investigative samples. These soil samples were included in the background sample data pool for subsurface soil UTL and mean calculations.

The Army does not believe that the samples collected beneath the water table could have biased the calculation of UTL or UCL values to any measurable degree. Because the concentrations of most analytes are in the  $\mu\text{g/l}$  (ppb) range for groundwater, and method reporting limits are in the  $\text{mg/kg}$  (ppm) range for soil, the effect of saturated versus unsaturated conditions on background analyte concentrations in subsurface soil would be negligible.

**Comment No. 16 - Page 3-17**

*Metals are naturally occurring as well as introduced by man. What is the basis for stating "However, these do not occur in concentrations sufficient to present risk" References to literature values should be provided.*

**Response**

Section 3.4.2 has been revised to indicate that concentrations of several metals are considered to be representative of normal background concentrations and therefore have not been carried forward in the screening risk evaluation. The wording mentioned in the comment has been removed. References to literature values have also been provided in Appendix C, Table C10.

**Comment No. 17 - Page 3-20**

*Page 3-20 suggests that vinyl chloride found at concentrations above the MCL at MW20 may indicate that this well was affected by the landfill. Were the data collected from this well included in the background data pool?*

**Response**

MW20 was originally used in the background groundwater assessment. However, HLA has assessed outliers and potentially contaminated background samples prior to performing the statistical analyses on the final validated data. Therefore, because Well MW20 appears to have been affected by the Sanitary Landfill (East), data for certain constituents from Well MW20 have been removed from the background data pool.

**Comment No. 18 - Page 3-25 - Target Restoration Goal**

*What does  $2.7 \times 10^{-5}$  represent in the equation.*

**Response**

The equation  $TRG (mg/kg) = (RfDo) \times 2.7 \times 10^5$  was taken directly from RAGS Part B, equation 5 (EPA, 1989c). The factor  $2.7 \times 10^5$  represents the constant reduced from all of the exposure values used to calculate the soil target remediation goal.

**Comment No. 19 - Table 3.1**

*Column 6 plus Column 11 does not add up to Column 10. Please explain.*

**Response**

Table 3.1 was unclear. Column 6 of Table 3.1, the screened interval of the well; and Column 11, the "stick-up" or length of well casing above or below ground surface, may not add up to Column 10, the total depth of the well (as measured from the reference point [top of well casing]). This may be caused by two reasons: (1) some wells were constructed with a silt trap at the bottom of the well, and (2) the infiltration and settlement of fines in the base of the well would indicate a total well depth shallower than what was originally constructed. However, the measurements indicated in Column 6 were taken from historical Army reports; the measurements indicated in Columns 10 and 11 were measured by HLA personnel in the field during the EI. The headings for columns 6, 10, and 11 have been changed for clarification.

**Comment No. 20 - Table 3.14**

*A UTL for groundwater cannot be acceptable to U.S. EPA if it is above an MCL i.e. Vinyl Chloride.*

**Response**

For the Final Phase I EI Report, the vinyl chloride detection in well MW20 has been removed from the background data set. Consequently, the vinyl chloride UTL is now lower than the MCL.

**Comment No. 21 - Section 4.1.1.2**

*If the field screening (soil gas) can not meet the planned objectives, the approach may have to be modified to meet the same objectives. The modifications made did not meet the same objectives. The extent of contamination in soil was not really determined. How will the original objectives be met? Why was headspace analysis of the soil samples not considered? (these comments apply to all sites)*

**Response**

Please see the response to General Comment No. 6 in this set of comments. Because soil-gas sampling was ineffective at EI Site 1, additional borings will be drilled and soil samples will be collected. The Army did not favor the use of headspace analysis in this case, because it is a relatively low-resolution method if performed with field instruments.

**Comment No. 22 - Section 4.1.1.3**

*Difficulties with water table determination should have been anticipated as this is a very common problem in glacial tills in the Midwest.*

**Response**

The comment is noted.

**Comment No. 23 - Figure 4.1**

*This figure should be labelled as Planned and Actual Soil Gas Sampling Locations (this comment applies to soil gas sampling figures for all sites).*

**Response**

The comment is noted; however, the figures illustrate locations where samples were either collected or attempted. Where samples were collected, either ND is denoted for no detections, or analytes detected are shown. Where samples were attempted, but could not be collected because of low soil permeability, NS is shown. Locations that were planned but not attempted are not shown on Figure 4.1. Planned (proposed) soil-gas sampling locations were shown in the TSP (HLA,1993a).

**Comment No. 24 - Section 4.1.2**

*The discussion of results should provide some indication of the level of a contaminant found not just its presence or absence (this comment applies to all sites). If results are above background, how far above background are they, or at what percentage of sites are they above background?*

**Response**

A more thorough quantification of samples exceeding background at each site has been added to the text.

**Comment No. 25 - Section 4.1.2.2**

*If Thallium is suspected as being related to natural variation, it should be so stated. It should be stated that the metals are not a suspected contaminant at this site. If metals such as Ba, Fe, Mn, are not site related it should be more clearly stated. Additionally, since these are naturally occurring metals, better characterization of background may be necessary. The writeup should focus on reasonable contaminants at each site given the historic practices (this sentence applies to all sites).*

**Response**

These metals are believed to be related to background variation, and Section 4.1.2.2 has been revised to state this more clearly. Additionally, background metals values from the literature have been provided in Table C10 in Appendix C. Site discussions have been revised to relate the chemicals identified to current or historic site practices wherever possible.

**Comment 26 - Section 4.1.2.3**

*Why was there no metals analysis on Groundwater?*



**Response**

As discussed in the TSP (HLA, 1993a), the suspected contaminants at EI Site 1 are solvents and petroleum products. Soil samples were analyzed for metals, but groundwater samples were not. Potential metals contamination associated with this site would most likely be related to the disposal of used oil. The used oil UST was addressed under other regulatory programs with IDEM.

**Comment No. 27 - Table 4.3**

*No details were provided on the rationale for individual sampling locations. This information would help in evaluating the data especially if the information is related to past chemical use practices at the site (this comment applies to all sites).*

**Response**

The rationale for selection of sampling locations is included in the TSP (HLA, 1993a).

**Comment No. 28 - Sections 4.1.4 and 4.1.5**

*The conclusions and recommendations are appropriate only if missing possible contamination due to soil gas sampling difficulties is acceptable. Is this possibility acceptable?*

**Response**

Please see the response to General Comment No. 6 in this set of comments.

**Comment No. 29 - Section 4.2.1**

*Building 705 should read 422.*

**Response**

Section 4.2.1 text has been revised as requested.

**Comment No. 30 - page 4-11**

*Because full results are not provided in Tables it is difficult to determine how many samples were actually collected from each boring for analysis (this comment applies to all sites).*

**Response**

Full analytical results have been added to the Final Phase I EI Report as Appendix \_\_.

**Comment No. 31 - Section 4.2.2.3**

*The last two paragraphs results, the 2nd last stated acetone was the only parameter that exceeded background. The next paragraph states it is above the reporting limit. Which is it, or are they the same.*

**Response**

Section 4.2.2.3 has been revised to correct the inconsistency.

**Comment No. 32 - Section 4.2.4 and 4.2.5**

*Since acetone is suspect as a common laboratory contaminant, resampling of the wells should be considered to address the issue.*

**Response**

All wells sampled during the Phase I EI field program have been recommended for confirmatory sampling during Phase II, as stated in Sections 4.2.5 and 5.2.

**Comment No. 33 - Section 4.3.1**

*Building 705 should read 619.*

**Response**

Section 4.3.1 has been revised as requested.

**Comment No. 34 - Section 4.4.1**

*Building 705 should read 26.*

**Response**

Section 4.4.1 has been revised as requested.

**Comment No. 35 - Page 4-32**

*The presence of perchloroethylene (PCE) at a depth of 6 feet is not evaluated. Why not, and why is it not incorporated into the risk evaluation for soil?*

**Response**

Tetrachloroethene (PCE) in subsurface soil is discussed on page 4-33 of the draft report and in Section 4.4.2.2 of the Final Phase I EI report. The risk tables in Appendix F have been revised to include both TCE and PCE in subsurface soil. However, the risk was not estimated previously because the potential for exposure is low in subsurface soil.

**Comment No. 36 - Page 4-32**

*The discussion focusses on total metals in groundwater but does not discuss the effect of TSS values on total metals levels. Why is this discussion not included. There is no discussion of the relative downgradient increase.*

**Response**

Total suspended solids (TSS) were not analyzed on groundwater samples. However, the effect of suspended solids can be assessed by comparing the results of total and dissolved metals concentrations. A comparison of total and dissolved metals concentrations in background groundwater samples (RFI, Appendix K) indicate that metals such as aluminum, chromium, copper, iron, lead, nickel, and zinc occur primarily as suspended solids in the groundwater samples.

**Comment No. 37 - Section 4.5.1 and 4.5.1.3**

*Building 705 should read 4 in both places. Why were no groundwater samples taken at this site?*

**Response**

Sections 4.5.1 and 4.5.1.3 have been revised as requested.

No groundwater samples were collected at the site because none were called for in the TSP (HLA, 1993a). The nature of the chemicals likely to be found at the site (oil, PCBs) suggested possible soil contamination, and groundwater was not anticipated to be impacted.

**Comment No. 38 - Section 4.5.6**

*It is not clear why PAHs are being added. Why weren't they considered earlier? Please clarify.*

**Response**

The referenced section number is incorrect. It is assumed that this comment refers to Section 4.6.5, page 4-49. Additional PAH sampling was recommended because PAHs have been detected at other locations onpost, and may have been associated with coal fragments in soil. Analysis for PAHs was not proposed for this site in the TSP (HLA, 1993a) because the sampling recommendations in the Enhanced PA (Weston, 1992) were limited to pH and metals.

**Comment No. 39 - Section 4.6.1.2**

*Again, why was groundwater not sampled.*

**Response**

Groundwater sampling was not performed at this site because it was not included in the TSP (HLA, 1993a). Groundwater was not sampled because the EI is being conducted in a phased approach and groundwater effects were not anticipated. Phase II investigations may include recommended groundwater sampling if appropriate.

**Comment No. 40 - Section 5.0**

*Section 5.3 does not match the recommendations for Site 4. Additionally, the water level data by itself may not provide information on the hydraulic characteristics across the facility.*

**Response**

Section 4.4.4 has been revised to indicate that a confirmatory round of groundwater sampling is recommended for EI site 4. The recommendation for the addition of pesticide analysis has been deleted from Section 4.4.4 because the pesticide concern was related to EI Site SM18, rather than EI Site 4. Section 5.3 is correct.

Additional groundwater-level data will not provide information on hydraulic characteristics. Section 5.2 has been revised to indicate that it will provide additional information on groundwater flow direction and water-level fluctuations.

Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**RESPONSES TO INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
COMMENTS REGARDING  
THE DRAFT PHASE I ENVIRONMENTAL INVESTIGATION REPORT**

**RESPONSES TO INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
COMMENTS REGARDING THE DRAFT PHASE I ENVIRONMENTAL INVESTIGATION  
REPORT FOR FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA, MAY 4, 1994**

**Comment No. 1 - Section 2.1.3.1, Page 2-6, 1st Paragraph**

*Have the Corps of Engineers participated in the identification of wetlands at FBH?*

**Response**

A wetlands identification survey was performed by the U.S. Fish and Wildlife Service in 1992; a complete reference for this survey is provided in Section 7.0 of the Final Phase I EI Report. The wetlands identification provided in Section 2.1.3.1 of the Final Phase I EI Report is based on that survey in which the U.S. Army Corps of Engineers did not participate. However, the U.S. Army Corps of Engineers, Louisville District, is currently completing an additional survey.

**Comment No. 2 - Section 2.1.3.2, Page, 2-7, 3rd Paragraph**

*The impacts from the landfills on the groundwater quality at FBH should be summarized in this paragraph. Specific concentrations and names of constituents should be included or referenced in this report.*

**Response**

A discussion of analytes and concentrations of chemicals detected near the landfill has been added to Section 2.1.3.2 in the Final Phase I EI Report.

**Comment No. 3 - Section 2.4, Page 2-17, Last Paragraph**

*The second sentence should read, "EPA is the lead regulatory agency on the RCRA Corrective Action Sites, and IDEM is the lead regulatory agency on the EI sites to be investigated."*

**Response**

Section 2.4 text has been revised as requested.

**Comment No. 4 - Table 2.3**

*The Army has stated that all UST/LUST present at the site are managed by FBH in accordance with IDEM's UST/LUST program. IDEM's UST/LUST files are not complete concerning LUST/UST activities at FBH.*

*Are the UST's at FBH registered with IDEM? Have the LUST's been closed through IDEM's LUST remediation requirements?*

**Response**

The Army reports that USTs at FBH are registered with IDEM. Several tanks have been closed following the UST Site Closure Guidelines (IDEM, Office of Environmental Response, UST/LUST Branch, July 1, 1992). Specifically, USTs at Building 619 (EI Site 3) and Building 705 (EI Site 1)

were closed in 1992. Soil remediation in the vicinity of the former USTs at Building 619 was completed during January 1994, under the direction of the U.S. Army Corps of Engineers.

**Comment No. 5 - Section 3.1.1, Page 3-2, 1st Paragraph**

*The soil-gas investigative technique was used to investigate the EI sites. IDEM believes (as stated in previous comments) that Soil Gas Surveys (SGS) can be adversely affected by impermeable materials (clay and fine silt) and high soil moisture which reduce vapor movement in soil and may prevent collection of a representative sample.*

**Response**

The soil-gas investigative technique was used to investigate four EI sites. The purpose of the soil-gas surveys was to evaluate the likelihood of volatile contaminants being present at the sites, to decide whether subsurface soil samples should be collected, and to direct the placement of the soil borings. The soil-gas survey met with limited success. Therefore, optional subsurface soil samples were collected at all four sites.

**Comment No. 6 - Section 3.1.4, Page 3-3**

*A detailed figure showing the 21 background surface soil sampling locations would be helpful.*

**Response**

The 21 surface soil background sampling locations are shown in Figure 3.2 and the text has been revised to reflect this information. The locations are widely distributed so that a large scale map showing detailed site features is not possible. However, Table 3.5 has been added to Section 3.4.2, that describes background surface soil sampling locations and selection rationale.

**Comment No. 7 - Section 3.1.5, Page 3-3**

*"sties" should be "sites".*

*Also, a detailed figure showing the 11 background subsurface soil sampling locations would be helpful.*

**Response**

The misspelling has been corrected.

The 11 background subsurface soil sampling locations are shown in Figure 3.2 and the text has been revised to reflect this information. The locations are widely distributed so that a large scale map showing detailed site features is not possible. A Table 3.5 has been added to Section 3.4.2 that describes background subsurface soil sampling locations and selection rationale.

**Comment No. 8 - Section 3.1.6, Page 3-4, 1st Paragraph**

*A detailed figure showing the 17 background groundwater sampling locations would be helpful.*

*The basic quality of the data is questionable due to contradictory statements of the number of groundwater samples collected. "Groundwater samples were collected for analysis for four EI sites and*

*seventeen background sampling locations." "sixteen wells were sampled during the EI." These statements contradict each other for the number of groundwater samples collected.*

**Response**

The 17 background groundwater sampling locations are shown on Figure 3.2 and the text has been revised to reflect this information. The locations of the background monitoring wells are so widely distributed that a large scale map showing detailed site features is not possible. Table 3.5 has been added to Section 3.0 to describe background groundwater sampling locations and provide the rationale for selecting those locations.

The statements identified in the comment have been rewritten to clarify the apparent contradiction. Wells sampled during the EI are different from wells sampled for the background assessment. Twelve groundwater monitoring wells were sampled at three EI sites during the Phase I EI field program. In addition, seventeen groundwater monitoring wells were sampled for the background assessment for both the Phase I EI and RFI field programs.

**Comment No. 9 - Section 3.2, Page 3-5**

*"To assess the background concentrations for analyses in the various analytical suites and sample media at FBH, sampling was generally conducted in areas believed not to have been influenced by past site activities."*

*What reasoning was used to determine if background sampling locations were influenced by past site activities?*

**Response**

Background sampling locations were selected on the basis of current operations, historical aerial photographs, maps and records, and visual inspection. Locations were chosen where the information available did not identify current or past use by the Army. The sampling locations were selected in areas that would not have been influenced by known sources and that have the same basic characteristics as the media of concern in investigation site areas.

**Comment No. 10 - Section 3.4.1, Page 3-11, 2nd Paragraph**

*This paragraph states if no exceedances above background concentrations occur at an EI site, the EI site is recommended for a no further action request. In this case the Army will make a request to EPA that no further action be performed, and will produce a decision document for EPA's approval that will propose the request and the justification for the request being made.*

*IDEM is the lead regulatory agency for EI sites. If no exceedances above background levels occur the Army should make a request to IDEM that a no further action be performed.*

**Response**

The text has been revised as requested.



**Comment No. 11 - Section 3.4.2, Page 3-13, Last Paragraph**

*What rationale was used in assessing background samples were collected outside potentially contaminated areas?*

**Response**

Please see the response to Comment No. 9.

**Comment No. 12 - Section 3.4.2.1, Page 3-17, 2nd Paragraph**

*The choice of background sample locations may not have been valid. PAH compounds were detected in the background surface soil samples at concentrations as high as 20 mg/kg. This casts doubt on the validity of the background sample.*

**Response**

Although background locations were selected to avoid influenced areas, it appears that a few of the background samples may have been collected in areas that were influenced by past Army activities. From comparison of analytical data to field observations and boring logs, small fragments of coal were present at some of the selected background locations. Coal was used onpost for heating in the past, and it is possible that a few of the background or EI site sampling locations may be located in areas with scattered coal fragments from an old coal pile or from coal-containing fill. Although it is likely that coal fragments caused the PAH detections in the background locations, these coal fragments are not related to the investigation sites being evaluated.

The Army has removed PAH analytical data for such sites from the background sample data pool. Dixon's outlier test was used to identify results in the background data set that appeared to be outliers. Once outliers were identified by this test, the results were manually reviewed along with boring logs, sampling forms or other supporting field documentation and validation results to assess the accuracy of Dixon's outlier test. In general, for cases of one to two high detects in the midst of a group of nondetects, these detects were treated as outliers if the detects were greater than five times the reporting limit. For detects less than five times the reporting limit, the detect was retained and not treated as an outlier.

**Comment No. 13 - Section 3.4.2.1, Page 3-17, 2nd Paragraph**

*This paragraph states that types and concentrations of metals detected in the background surface soil samples are representative of native surface soil. Thallium is used in the manufacture of electronic devices and switches. Could Thallium have been used to support past site activities?*

**Response**

The Army is not aware of any past or present site use involving the manufacture of electronic devices or switches. The Army is also not aware of any reason other than natural variability why thallium concentrations would be elevated in some of the background samples; therefore, no thallium data have been removed from the background sample data set unless they were identified in the statistical outlier evaluation.

**Comment No. 14 - Section 3.4.3.5, Page 3-22**

*The "Indiana Department of Environmental Quality" should be changed to the "Indiana Department of Environmental Management".*

**Response**

Section 3.4.3.5 has been revised as requested.

**Comment No. 15 - Section 3.4.3.5, Page 3-23, 1st Paragraph**

*The second sentence should add "incorporating changes agreed upon by the Voluntary Remediation Program Technical Standards Committee" after EPA.*

**Response**

Section 3.4.3.5 has been revised as requested.

**Comment No. 16- Section 3.4.4.1, Page 3-27, 1st Paragraph**

*RAGS Part A (EPA, 1989c) states that if naturally occurring chemicals contribute a significant portion of the risk, this contribution should be identified. However, RAGS does not state the subtraction of background concentrations to reduce the potential risks be performed.*

**Response**

Although RAGS does not recommend that subtraction of background risks be performed, it does state that background concentrations may present a significant risk. At FBH, many of the concentrations estimated for site-related chemicals are low and approach background concentrations. In these instances, the contribution of background concentrations is a large portion of the total estimated risk. The screening risk evaluation was conducted to identify the incremental risk associated with site-related chemicals. Therefore, it is essential to evaluate the risks from site-related chemical concentrations, which implies that a comparison be performed. As stated in RAGS, a statistically significant difference between background samples and site-related contamination should not, by itself, trigger a cleanup action, and the toxicological -- rather than simply statistical -- significance of the contamination must be ascertained. The objective of a risk assessment is to evaluate whether a source results in an incrementally unacceptable risk, and if it does, the source should be considered for remedial action. If the incremental risk from site-related concentrations was less than  $1 \times 10^{-6}$ , it was considered inappropriate to recommend further evaluation (and possible remediation) to clean up to background concentration when the background concentration would still contribute a substantial risk.

**Comment No. 17 - Section 3.6, Page 3-34, 1st Paragraph**

*"... the static water level was at a higher level than first encountered when the monitoring well was allowed to equilibrate, indicating that the clays are saturated..... This downward gradient may cause the sand lenses to appear confined locally..." The last sentence should refer to an upward gradient. This needs to be clarified.*

**Response**

The text in Section 3.6 has been revised. No well clusters (collocated wells) were installed during the Phase I EI/RFI. Water-level data used to assess vertical gradients are not available.

**Comment No. 18 - Table 3.1**

*The representative quality of the groundwater samples are uncertain due to the evaluation of the monitoring wells presented in table 3.1. The majority of the 29 monitoring wells are improperly constructed or poorly maintained. Numerous reports are made describing no cap, no lock, improper grouting, cracked concrete pads, and surface water infiltration. The locations of the groundwater samples needs to be individually discussed to determine the representative quality of each sample.*

**Response**

As summarized in Table 3.1 of the Final Phase I EI Report, wells LRC1 through LRC4 at SWMU #FBH8 were in sufficiently poor condition to warrant abandonment, which was recommended and performed. At these wells, the surface grout seal had totally separated from the PVC well casing, and the wells had no integrity. At several other wells, however, cracks in the surface seal were noted, but it did not appear that the integrity of the bentonite seal had been lost. The wells that were sampled (MW12 through MW25) were constructed according to USAEC requirements and appeared to retain the integrity of the bentonite seal such that the samples collected from the monitoring wells were representative of shallow aquifer conditions. In some cases, it was recommended that the surface completion be repaired to minimize further deterioration.

**Comment No. 19 - Table 3.2**

*The selection of background samples should be justified. A detailed map with the background sample locations should be provided.*

**Response**

Tables 3.5 has been added that lists descriptions of background sampling locations and the selection rationale. Background sampling locations are shown in Figure 3.2, and because of the wide distribution of sampling locations, more detailed maps showing background locations are not feasible to produce.

**Comment No. 20 - Table 3.12 and 3.13**

*The utilization of non-parametric upper tolerance levels is not always adequate. It is appropriate to utilize when the number of non-detects is over 15% of the total sample points. However, in other cases of non-parametric distributions it is recommended to use the upper prediction limit. In this case the upper prediction limit will be the highest detection in the background samples for some areas. It should be easy to base the conclusions on upper prediction limits since this data has already been presented in this document.*

*In cases of normal and lognormal distributions the tolerance limits are not appropriate for the evaluation. The values of standard error should be calculated with 95% of confidence interval.*

*These deficiencies are significant because they will lead to the misinterpretation of the natural variability of the compounds detected in the background samples. As follows from the data presented*

*some values of natural variability are overestimated which leads to false "naturally occurring" determinations, others are underestimated which leads to false "contamination" determinations.*

## Response

In the first paragraph, this comment states that for certain cases, non-parametric prediction limits should be used instead of the non-parametric upper tolerance limits (UTL) that were used to establish background concentrations. Both of these methods (non-parametric prediction limits and tolerance limits) use the highest value detected as the upper limit. There is no difference in the value used for the upper limit for either method. The only difference is in the interpretation of the result.

The UTL is interpreted as follows. Given  $n$  background measurements and a desired confidence level, a non-parametric tolerance interval will have a certain coverage percentage. For example, for 10 background measurements, at the 95% confidence level, 74.1 percent of the background values will fall within the tolerance interval (EPA, 1992). If the investigative value is higher than the UTL, then there is significant statistical evidence of contamination.

The upper prediction limit involves the confidence probability that the next future sample or samples will fall below the upper prediction limit. Because the same (maximum) value is used for either case, an interpretation using either method is valid. The above definitions and example are taken from Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance (EPA, 1992).

The second paragraph of this comment states that for normal and lognormal data, the UTL is inappropriate, and the 95% confidence interval should be used. UTLs are recommended by the EPA for comparing background data to investigative data in the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities (Interim Final Guidance, [EPA, 1989]).

The 95% UTL at 95% confidence (the values used in this investigation) means that one has a confidence level of 95% that 95% of the background observations are below the UTL. If the investigative sample value is higher than the UTL, there is statistically significant evidence of contamination.

On the other hand, confidence intervals are used to provide an approximation of true mean concentration. The 95% confidence limit means that one is 95% confident that the true mean lies within the confidence interval (range). By definition, 50% of the population values will fall above the mean. This method would be appropriate to compare mean concentration at an investigative site to background mean concentration.

The comparison of investigative samples to the UTL is more appropriate for the FBH RFI/EI because individual samples are assessed for the investigative sites. The Army believes that, because outliers have been removed from the background data set for the background data evaluation for the Final Phase I EI Report, the likelihood of "false negatives" at investigation sites is very small. By contrast, the likelihood of "false positives" being identified as requiring remediation would be appreciably higher if individual investigative sampling results were compared to the 95 percent Upper Confidence Limit (UCL) of the mean for background data.

## Comment No. 21 - Section 4.3.1.1, Page 4-17, Last Paragraph

*Same concern as previous comment regarding UST/LUST activities at the site.*

**Response**

Please see the response to Comment No. 4.

**Comment No. 22 - Section 4.3.1.3, Page 4-21, 1st Paragraph**

*"USATHAMA" should be replaced with "USAEC".*

**Response**

Section 4.3.1.3 text has been revised as requested.

**Comment No. 23 - Section 4.3.1.3, Page 4-21, 2nd Paragraph**

*"USATHAMA" should be replaced with "USAEC".*

**Response**

Section 4.3.1.3 text has been revised as requested.

**Comment No. 24 - Section 4.4.1.2, Page 4-28, 1st Paragraph**

*EI Site 4 had the highest organic contamination in the soil gases with 4,700 ppb of TVHC and 7 ppb Vinyl Chloride at the Directorate of Installation Support (DIS). Three soil samples and monitoring well 1 in the same area as the above listed soil gas sample had no organic contaminants above the background soil and monitoring well concentrations.*

*The pattern of contaminant detections in the soil gas vapor survey has indicated higher contamination in the soil gas sample matrix than in the soil or groundwater matrix at EI Site 4. The expected pattern would be more contamination detected in the soil and groundwater with a lower level of contaminants diffusing into the soil gas vapors. This reversal of the expected relative concentration pattern may indicate that the gases have migrated from the source and that the source area has not been characterized.*

**Response**

The Army agrees that higher concentrations of volatiles would usually be expected in soil samples than in collocated soil-gas samples. However, at some soil borings this is not always the case because high soil-gas concentrations may result from the paved surface at the site. The pavement may trap volatiles in the gaseous phase, causing soil-gas concentrations to be higher than expected. However, ppm-range soil-gas detections would lead to the expectation of higher volatile detections in soil than those reported at some sampling locations at this site. The Army plans to collect additional subsurface soil samples at EI Site 4 to further evaluate the site. However, no VOC detections were reported for groundwater samples collected from monitoring wells installed at EI Site 4, indicating that any VOC contamination in soil is not affecting groundwater quality at the site.

**Comment No. 25 - Appendix C and D**

*The Draft Phase I EI report has been prepared using preliminary analytical data. Because the data are preliminary, a listing of all analytical data has not been included in this report. It is imperative to have data available to draw conclusions concerning these sites.*

**Response**

Analytical data for EI investigation samples have been included as Appendix D in the Final Phase I EI Report. These data have now been validated and include data flags or qualifiers where applicable. Statistical calculations have been reworked using the validated data and conclusions and recommendations have been revised, where appropriate.

**Comment No. 26 - Appendix E**

*The meaning of the values presented in Appendix E should be clarified.*

**Response**

Appendix E presents the methodology used for statistically evaluating background data and the results of that evaluation. The text explains the technical approach and the types of statistical tests and operations performed using the background data set. The tables present the results of the statistical tests and operations. The meanings of the values in each table are explained in Sections 3.1, 3.2, and 3.3 of Appendix E.

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IN4 210 090 003  
September 18, 1995

**RESPONSES TO U.S. DEPARTMENT OF THE ARMY COMMENTS REGARDING  
THE DRAFT PHASE I ENVIRONMENTAL INVESTIGATION REPORT**

**RESPONSES TO U.S. DEPARTMENT OF THE ARMY COMMENTS  
REGARDING THE DRAFT PHASE I ENVIRONMENTAL INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA, MAY 4, 1994**

**WATER QUALITY ENGINEERING DIVISION AND TOXICOLOGY DIVISION**

**SPECIFIC COMMENTS**

**Comment No. 1 - Chapter 2.1.3.2, Groundwater, last sentence**

*The name of this Agency is the U.S. Army Environmental Hygiene Agency.*

*Recommendation: Add the word "Hygiene" between the words "Environmental" and "Agency".*

**Response**

The text has been revised as recommended.

**Comment No. 2 - Chapter 2.1.3.2, Water Supply**

*Figure 2-4 does not show the locations of the seven water-supply wells. This figure only shows the locations of the 29 ground-water monitoring wells, and the Fort Benjamin Harrison well field.*

*Recommendation: Adjust the figure to show the locations of the seven individual water-supply wells. Another option would be to place the locations of these water-supply wells on Plate 1, Water Level Contour Map.*

**Response**

Review of Fort Benjamin Harrison (FBH) records (Raw Water Supply Main Phase I, Title sheet and key map, Directorate of Engineering and Housing, FBH, 30 June 1982) indicates that there are six wells in the water-supply well field (rather than seven identified in the text). Wells No. 6, 7, and 8 are not in use and have no attached buildings. Wells No. 9, 10, and 11 are in use and are associated with Buildings 516, 528, and 541, respectively. The locations of these wells have been added to Figure 2.4, and the text has been revised to indicate that the well field consists of six onpost water-supply wells.

**Comment No. 3 - page 2-14 and page 9 of 11 Table 2-3, Chapter 2.3, Current Operations, Hawley Army Hospital and the Dental Clinic (Bldg 300)**

*There are no activities recommended in the Enhanced PA, and nothing under the column headed RFI/EI Activity on Table 2-3.*

*Recommendation: Add some word(s) for clarity (i.e., none) in the appropriate columns. Do not leave the columns blank.*

**Response**

The Hospital and the two clinics were included as a unit in this table, and the activity recommended in the Enhanced Preliminary Assessment (PA) (Weston, 1992) applies to all three facilities. The words "Same as above" have been added to indicate this information.



**Comment No. 4 - page 2-20, Section 2.5, Summary of Previous Investigations, 4th paragraph**

*"Localized degradation was noted at certain well locations, as indicated by the periodic sampling events." Degradation of what?*

**Recommendation:** *Explain what was degraded. The sentence is not clear.*

**Response**

This sentence was quoted from the Enhanced PA (Weston, 1992). The use of the word "degradation" was vague. The sentence has been changed to "Detectable VOC concentrations were noted at certain well locations immediately downgradient from the landfills as indicated by the periodic sampling events. In particular, the presence of vinyl chloride concentration exceeding the MCL was confirmed for Well MW20."

**Comment No. 5 - Figure 3.3 - Section 3.0, Flow Chart for Statistical Analysis of Background Analytical Results**

*This figure implies that lognormally distributed data are transformed, the Upper Tolerance Limit (UTL) is calculated, then this value is "untransformed". It is unclear in Appendix M if this is the case. However that procedure is not valid. As highlighted in "Supplemental Guidance to RAGS: Calculating the Concentration Term", estimates of the mean of lognormally transformed data are not mathematically equivalent to the antilog of estimates of the mean of a transformed data set.*

**Recommendation:** *Evaluate UTL calculations on lognormally distributed data to determine mathematical and statistical accuracy.*

**Response**

The procedure used to calculate the upper tolerance limit (UTL) for lognormally distributed data is correct. The UTL is calculated on the basis of a normal distribution. Lognormally distributed data approximate a normal distribution when the data are log-transformed. The UTL is then calculated using the log-transformed data (for those populations assessed as lognormally distributed). Once the UTL is calculated, it can be expressed in logarithmic terms or its antilog, as long as the comparisons are consistent. The antilog is used because it is more familiar to most readers. The reviewer is correct in that a UTL calculated in this manner is not equivalent to a UTL calculated from the same data set without logarithmically transforming the data. The correct approach depends on the distribution of the data. Log-transformation was only applied to data assessed to be lognormally distributed.

**Comment No. 6 - page 4-9, Section 4.2.1, Investigation Activities Performed, first sentence**

*"The investigation activities performed at Building 705---"*

**Recommendation:** *Change the building number to Building 422, or EI Site 2, since Building 705 was EI Site 1.*

**Response**

Section 4.2.1 text has been revised as requested.

**Comment No. 7 - page 4-17, Section 4.3.1, Investigation Activities Performed, first sentence**

*"The investigation activities performed at Building 705..."*

**Recommendation:** Change the building number to Building 619, or EI Site 3, since Building 705 was EI Site 1.

**Response**

Section 4.3.1 text has been revised as requested.

**Comment No. 8 - page 4-27, Section 4.4.1, Investigation Activities Performed, first sentence**

*"The investigation activities performed at Building 705..."*

**Recommendation:** Change the building number to building 26, or EI Site 4, since Building 705 was EI Site 1

**Response**

Section 4.4.1 text has been revised as requested.

**Comment No. 9 - page 4-38, Section 4.5.1, Investigation Activities Performed, first sentence**

*"The investigation activities performed at Building 405..."*

**Recommendation:** Change the building number to Building 4, or EI Site 5.

**Response**

Section 4.5.1 text has been revised as requested.

**Comment No. 10 - page 4-39, Section 4.5.1.3, Investigation Sampling, first sentence**

*"The investigation sampling performed at Building 705..."*

**Recommendation:** Change the building number to Building 4, or EI Site 5, since Building 705 was EI Site 1.

**Response**

Section 4.5.1.3 text has been revised as requested.

**Comment No. 11 - Plate 1, Water Level Contour Map**

*According to the Explanation, the water-level contours are dashed where inferred; however, east and north, of monitoring wells MW-2 and MW-1; north of EI003MW002 and EI002MW003; and west and northwest of MW-24, the contours are solid where they should be dashed since there are no wells in that area.*

**Recommendation:** *Dash the contours where the water levels are inferred.*

**Response**

The water-table map has been revised to dash the water-level contours in the areas suggested.

**GENERAL COMMENTS****Comment No. 12**

*The statistical analyses presented in the report are excellent. In addition, the conclusion based on the background data are appropriately conservative yet fair. However, the authors may wish to consider comparing individual site sampling data values to the ninety-fifth percentile of the background population distribution rather than the upper tolerance limit (UTL). The UTL is an estimate (albeit a conservative one) of the population mean of the background. By definition, fifty percent of the samples collected would be expected to exceed the population mean. Comparison to the 95 percentile of the background population would more accurately determine if a sample in fact exceeds expected background concentrations.*

**Response**

The UTL is not an estimate of the mean of the background data. The UTL is based on the mean and standard deviation, but is the upper limit for a range that contains a certain percentage of the population. For example, the upper 95 percent tolerance limit at 95 percent confidence (the values used in this investigation) means that one has a confidence level of 95 percent that 95 percent of the background observations are below the UTL.

**Comment No. 13**

*The presentation of installation-wide sediment and surface water sampling in the background section, it is later specified that the data is used to assess FBH overall impacts on surface water quality. Other assessment of site impacts are presented Section 4.0. This section needs to be moved out of the background data discussion and suspended to clearly describe its purpose and conclusions.*

**Response**

The section on surface-water and sediment sampling has been moved from the background section in Section 3.2 and renamed "Basewide Surface-Water and Sediment Evaluation." The text is now included in Section 4.8 of the Final Phase I Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report. The purpose and conclusions of the study have been expanded, as requested.

**Comment No. 14**

*The organization of the report makes evaluation of each RI site difficult. Specifically, the text of each analysis refers to a table summarizing EI activity in Section 3, background concentrations tabulated in Section 3, site data tabulated at the end of Section 4, site maps at the end of Section 4, Statistics presented in Appendix E, and risk evaluation presented in Appendix F. While consolidation of methodologies is advantageous to the reviewer, site specific information needs to be grouped with the site discussion so that all information can be digested. Consider placing the RFI activity summary, site specific data, site maps, and risk evaluation adjacent to the discussion in the report text.*

**Response**

Although the difficulty in digesting all the mentioned text, tables, and figures is understood and appreciated, the difficulties that would be involved in splitting up the appendixes, tables, and figures and placing them in the corresponding text sections would be significant. In addition, it is uncertain

that the report would be any less complex. Therefore, the structure of the report has not been changed.

**Comment No. 15**

*Although the objective of this document is to screen for potential hazards, the basis for the preliminary risk calculation should be described. Include reference values and slope factors used in determining preliminary risk values.*

**Response**

Reference doses and slope factors used in determining preliminary risk values were included in the draft Phase I EI Report in Tables 3.18 and 3.19.

**Comment No. 16**

*A preliminary screen using the hazard quotient/hazard indices approach can be accomplished using the current soil and water data. For example, compare soil data to toxicology data for terrestrial species like earthworms. The same could be done with water and sediment data comparing to toxicology values for aquatic organisms. This would narrow the scope for a complete ecological risk assessment.*

**Response**

It is agreed that the hazard quotient/hazard indices approach could have been used for the screening hazard evaluation of the draft Phase I RFI and EI reports to assess potential impacts of sites to ecological receptors. However, use of the more detailed hazard quotient/hazard indices approach is more appropriate in a baseline ecological risk assessment to evaluate potential impacts to specific terrestrial and aquatic indicator plants and animals.

The methodology that was selected for the screening hazard evaluation involved comparing the predicted amount of chemical ingested in soil to concentrations known to adversely affect small mammals (i.e., rats and mice). This methodology was used because toxicological data for rats and mice are readily available for a wide variety of chemicals, including those detected at FBH RFI and EI sites. Chemical toxicological data for earthworms are more limited; therefore, a hazard quotient approach using earthworms could only be used to evaluate some, but not all, of the chemicals detected at the sites.

Similarly, the hazard quotient approach could also have been used in the screening hazard evaluation for aquatic organisms. However, the comparison of chemical concentrations in investigative surface-water samples to federal ambient water quality criteria (AWQC) is a more commonly used screening method to evaluate the potential for adverse impacts to aquatic systems. Because there is still much debate as to the appropriate application of modifying factors, uncertainty factors, and other issues associated with the hazard quotient method, the AWQC comparison was considered the most defensible screening method for aquatic receptors.

## **INSTALLATION MANAGEMENT COMMAND**

### **SPECIFIC COMMENTS**

#### **Page 2-13, last paragraph of Section 2.2.2**

*The last sentence states, "the possibility of registering several other buildings at FBH." The nomination for establishing a historic district at FBH (inclusion in the National Register of Historic Places) has already gone forward to the Department of the Interior from the Office of the Deputy Secretary of the Army (Environment, Safety and Occupational Health). The historic district includes primarily the Lawton Loop and Sergeants' Row housing areas (including 75 buildings (19 noncontributing buildings), 1 site (1 noncontributing site), and 3 structures (3 noncontributing structures). Mr. David Guldenzoph, AFIM-AEC-EC, 410-671-1265, can provide an update of the status of this nomination.*

#### **Response**

The text has been revised to include the above information.

#### **Page 2-16, 2d paragraph, last sentence**

*Last sentence states closure is expected by 30 Sep 97. Closure is expected by 30 Sep 96 when caretaker operations will begin.*

#### **Response**

The text has been revised as requested.

## **USAEC PROJECT GEOLOGIST**

No comments were received regarding the EI.

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**Appendix N**

**RESPONSES TO COMMENTS FINAL PHASE I  
ENVIRONMENTAL INVESTIGATION REPORT**

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**RESPONSES TO INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
COMMENTS REGARDING THE FINAL PHASE I  
ENVIRONMENTAL INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA,  
July 18, 1994**



**RESPONSES TO INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
COMMENTS REGARDING THE FINAL PHASE I ENVIRONMENTAL INVESTIGATION  
REPORT FOR FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA,  
July 18, 1994**

**REVIEW OF RESPONSES TO IDEM'S COMMENTS ON THE DRAFT PHASE I EI REPORT**

**Comment No. 1**

*Specific information on the type of study the Army Corps of Engineers (COE) is currently working on would be helpful. Also is an estimated completion date for this study known?*

**Response**

Section 2.1.3.1, page 2-6 contained an error regarding an additional wetlands study. The U.S. Army Corps of Engineers (COE) is not conducting an additional wetlands study; Section 2.1.3.1 has been corrected in the Revised Final Phase I EI Report (September 1995).

**Comment No. 4**

*The response provided is inadequate. IDEM's UST/LUST records are not complete concerning UST/LUST activities at FBH provided in this and other reports. IDEM records indicate 34 registered USTs at Building 28, a request for two UST closures in 1992, and a current status of two USTs removed or filled, one out of service, and 31 in service. On page 17, in paragraph 6 of the CERFA Report (Arthur D. Little, Inc., April 1994) it is reported that "The Enhanced PA lists 37 USTs at FBH, of which 23 has been removed or were scheduled for removal in 1992, and one was permanently out of service. Twenty-one USTs were listed on the federal Notification for Underground Storage Tanks form (January 1991); 10 of these USTs were removed in 1992. The 11 USTs currently in service at FBH are registered and leak tested regularly."*

*The document currently under review presents vague and different numbers in the Response to Comment No. 4 which include:*

- "... USTs at FBH are registered with IDEM ..."
- "Several tanks have been closed ..."

*The response states USTs at EI site 1 and 3 were closed in 1992, but does not indicate the number of USTs at either site. The response then mentions the completion of soil remediation at Building 619 in January 1994. There is no record of this in IDEM files. These numbers clearly do not match. It is recommended that a representative of this site contact the IDEM UST/LUST Branch to reconcile files.*

**Response**

The Army is working with IDEM to reconcile records regarding underground storage tanks (USTs) and leaking USTs (LUSTs) at Fort Benjamin Harrison (FBH). This reconciliation is being handled separately from the finalization of the Phase I Environmental Investigation (EI) Report.

**Comment No. 5**

*The response is noted, however, IDEM has presented numerous comments questioning the ability of a soil-gas investigation to collect a representative sample at FBH.*

**Response**

No response is required.

**Comment No. 6**

*The response to comment No. 6 should refer to Figure 3.3 which shows the 21 surface soil background sampling locations not Figure 3.2.*

**Response**

Figure 3.2 in the Revised Final Phase I EI Report (September 1995) shows sampling locations of the 21 surface soil background sampling locations.

**Comment No. 7**

*The response should refer to Figure 3.3 not Figure 3.2.*

**Response**

Figure 3.2 of the Revised Final Phase I EI Report (September 1995) shows locations of the background subsurface soil sampling locations.

**Comment No. 8**

*The response should refer to Figure 3.3 not Figure 3.2.*

**Response**

Figure 3.2 in the Revised Final Phase I EI Report (September 1995) shows locations of the background groundwater sampling locations.

**Comment No. 16**

*It is believed biological and human populations are exposed to the toxic effects of chemicals from both the background and the site-related activities (added toxicity), not to the "incremental" toxicity of site related chemicals only. The subtraction of the background data for the risk assessment purposes is an unacceptable practice. The clean up goals could be adjusted for the background concentrations after appropriate calculations are performed.*

**Response**

The Phase I Screening Risk Evaluation and Screening Hazard Evaluation were discussed at the February 15 and 16, 1995 meeting held in Chicago, Illinois, and attended by individuals representing the Indiana Department of Environmental Management (IDEM), the U.S. Environmental Protection Agency (EPA) Region 5, the Army and the Army's contractors. During this meeting, at the direction of the regulatory agencies, the Army agreed that risk screening will not be performed to identify sites for no further action during Phase I. All sites with chemical concentrations exceeding background will be carried into Phase II. A baseline risk assessment will be conducted during the Phase II EI investigation following the approach described in EPA's Risk Assessment Guidance for Superfund.

**Comment No. 19**

*The response should refer to Figure 3.3 not Figure 3.2.*

**Response**

The locations of the respective Phase I EI background sample sampling locations are presented in Figure 3.2 in the Revised Final Phase I EI Report (September 1995).

**Comment No. 25**

*Concerns regarding the analytical data and statistical calculations will be presented later in this letter.*

**Response**

The comment is noted.

## **SPECIFIC COMMENTS**

### **REVIEW OF THE 23 SITES (PAGES 4-42 TO 4-14[1]) ADDED TO THE FINAL PHASE I EI REPORT**

#### **Comment No. 1, Section 4.7.5, page 4-46, 1st bullet**

*What is the estimated time frame concerning the collection of four surface soil samples and four subsurface soil samples at this site?*

#### **Response**

The four surface soil samples and four subsurface soil samples will be collected during the Phase II field investigation. A schedule of field activities will be provided in the Phase II EI Technical Sampling Plan (TSP).

#### **Comment No. 2, Section 4.7.5, page 4-47, 2nd bullet**

*There seems to be a possible migration of contaminants from the site via surface water due to the pumping of contaminated water from the basement through an electrical sump pump connected to a garden hose. What is the direction of surface drainage?*

#### **Response**

The Army discontinued pumping of water from the basement of Building 27 in approximately March 1994. When pumping did occur, the water was pumped onto the adjacent lawn east of the building. This lawn is several inches lower than the paved areas that surround it. As a result, the potential for migration of contaminants by surface water is low. The water pumped from the basement is more likely to have infiltrated into the ground. Monitoring well installation and sampling will be performed during the Phase II EI (Section 4.7.4 of the Revised Final Phase EI Report [September 1995]) to assess the presence of contaminants in groundwater at this site.

#### **Comment No. 3, Section 4.7.5, page 4-47, last bullet**

*The installation of one upgradient and one to two downgradient monitoring wells near the building is recommended. What is the time frame for the installation of these wells?*

#### **Response**

The monitoring wells at EI Site SM18 will be installed during the Phase II field investigation. A schedule of field activities will be provided in the Phase II EI TSP.

#### **Comment No. 4, Section 4.9, page 4-50**

*The location of Hawthorn Pond should be depicted in Figure 4.26.*

**Response**

The scale of Figure 4.26 does not allow for the depiction of Hawthorne Pond. However, Figure 3.1 of the Revised Final Phase I EI Report (September 1995) shows the location of Hawthorne Pond relative to Buildings 604 and 605. The text has been revised to reference Figure 3.1.

**Comment No. 5, Section 4.9.1, page 4-51**

*Reported by whom or what documentation?*

**Response**

During the Phase I field investigation, Army personnel indicated that Building 605 was formerly used as a pump house and repair of electrical equipment may have occurred at the site.

**Comment No. 6, Section 4.9.1.1, page 4-53**

*Sample locations were revised from what was indicated in the TSP because surface runoff from the site appeared to enter the drainage ditch located northeast of Building 605 over a wider area than originally thought. What was the approximate increase in the sampling area?*

**Response**

Locations of the surface water and sediment samples were changed to locations further downstream and further upstream to account for a wider area of surface water runoff from the site than previously estimated. Upstream samples were collected approximately 75 feet further upstream than proposed in the Phase I TSP, and downstream samples were collected approximately 25 feet further downstream than proposed in the Phase I TSP (based on Figure 6.8 of the Phase I TSP).

**Comment No. 7, Section 4.11.2.1, page 4-66**

*Lead concentrations as high as 49,000 mg/kg were detected in surface soil samples collected from this site. The possibility of groundwater contamination from metals may exist due to the high concentrations in surface soil samples.*

**Response**

The Army will develop a plan for evaluating the potential for groundwater contamination in the area of EI Site SM22. The details of this investigation will be presented in the Phase II EI TSP. The recommendations for this site have been revised accordingly.

**Comment No. 8, Section 4.12.2.1, page 4-74**

*Is there a potential for groundwater contamination to exist at this site due to high concentrations of metals?*

**Response**

The potential for groundwater contamination may exist at this site based on the high concentrations of metals. The recommendations for EI Site SM23 have been revised to include an investigation to

evaluate the potential for groundwater contamination. The details of this investigation will be provided in the Phase II EI TSP.

**Comment No. 9, Section 4.12.5, page 4-79**

*The statement that the existing analytical data are considered adequate to characterize the site is questionable.*

**Response**

The statement has been deleted from Section 4.12.5 of the Revised Final Phase I EI Report (September 1995). Additional field work at this location will be proposed in the Phase II EI Work Plan. The recommendations for this site have been revised to indicate that further site characterization will be performed. The Army will provide details of the Phase II EI field activities in the Phase II EI Work Plan.

**Comment No. 10, Section 4.13, page 4-79**

*How long has the range been used by the Rod and Gun Club for firing shotguns?*

**Response**

Fort Benjamin Harrison personnel indicate that the skeet range has been used by the Rod and Gun Club to fire shotguns since approximately the 1960s.

**Comment No. 11, Section 4.13.5, page 4-85, 1st bullet**

*Is an estimated time frame set for the installation of monitoring wells to assess potential groundwater contamination at the site?*

**Response**

The monitoring wells at EI Site SM24 will be installed during the Phase II field investigation. A schedule of field activities will be provided in Phase II EI TSP.

**Comment No. 12, Section 4.15.5, page 4-92**

*All carcinogenic risks exceed the surface soil criteria. When are Phase II activities scheduled to begin?*

**Response**

The Phase I investigation conducted at this site was discussed during the February 15 and 16, 1995 meeting held in Chicago, Illinois. During this meeting it was agreed by the meeting participants, that additional field work will be conducted at this site located at the FBH golf course, following an accelerated schedule, to further characterize possible contaminants. The Phase II accelerated field work at two Golf Course Sites (EI Sites 25b and c) were completed during the summer of 1995.

**Comment No. 13, Section 4.16.5, page 4-99**

*Is there potential for groundwater to be affected by contaminants at this site?*

**Response**

Metals were detected in subsurface soils at concentrations higher than background concentrations. However, the metal concentrations were low enough to indicate that they are not likely to be associated with site-related activities but are likely naturally occurring. Therefore, groundwater is unlikely to have been adversely affected.

Because this site is located within the boundary of the FBH Golf Course, additional field investigation was conducted during the summer of 1995 at this site according to an accelerated schedule.

**Comment No. 14, Section 4.17.3, page 4-101**

*No further action is recommended for this site on the basis of the results of the records review and site reconnaissance. Previous observations during a 1992 archaeological survey noted junk car parts were present. The more recent site reconnaissance noted minimal household related debris and no junk car parts. No sampling was conducted to determine if hazardous waste or hazardous constituents were released into the environment. The presence of auto parts warrants further investigation. Surface and subsurface soil sampling is recommended.*

**Response**

Because the auto parts were removed from this site, it is not possible to select sampling locations to evaluate the possible effect of the auto parts on surface and subsurface soils. The Phase I EI records review and site reconnaissance did not indicate that hazardous materials or hazardous substances were disposed of as waste by the Army at EI Site SM25d. Therefore, surface and subsurface soil sampling is not recommended. The text of the Revised Final Phase I EI Report (September 1995) has been revised to clarify the basis for this recommendation.

**Comment No. 15, Section 4.18.3, page 4-103**

*No sampling was conducted to determine if hazardous waste or hazardous constituents were released into the environment. It is difficult to support a no further action at a site that has the potential for releasing hazardous waste based on a visual inspection.*

**Response**

The Phase I EI records review and site reconnaissance did not indicate that hazardous materials or hazardous substances were disposed of as waste by the Army at EI Site SM25e. Therefore, additional investigation was not recommended. The text of the Revised Final Phase I EI Report (September 1995) has been revised to clarify the basis for this recommendation.

**Comment No. 16, Section 4.21.1.2, page 4-112**

*The second to last sentence in this section is repeated.*

**Response**

The repeated sentence has been deleted from the text of the Revised Final Phase I EI Report (September 1995).

**Comment No. 17, Section 4.22.4, page 4-121, 1st bullet**

*Information obtained from the records review revealed that a water treatment facility was once located near this site. It is not stated whether it was a wastewater or drinking water facility. Without knowledge of the past use of the site, it is difficult to determine if the investigation was adequate to characterize the threat to the environment.*

**Response**

The available information reviewed during the Phase I EI records review does not provide sufficient data to identify whether a wastewater, or water treatment plant, was once present at this site. Because of the uncertainty regarding the past use of this site, a broad suite of chemicals were analyzed for during the Phase I EI including semivolatile organic compounds, herbicides, pesticides/polychlorinated biphenyls, metals, anions, cations, total phenols, and total organic carbon. This suite of analytes was sufficient to detect the presence of likely contaminants at the site.

**Comment No. 18, Section 4.22.5, page 4-121**

*The recommendation refers to EI Site SM25h. EI Site SM25h should be changed to Site SM25i.*

**Response**

The text has been revised.

**Comment No. 19, Section 4.25.2, page 4-133**

*What type of UXO subsurface location technology will be utilized?*

**Response**

The Phase I investigation conducted at this site was discussed during the February 15 and 16, 1995 meeting held in Chicago, Illinois. During this meeting it was agreed by the meeting participants, that additional field work will be conducted at this site, located at the FBH Golf Course, following an accelerated schedule, to further characterize possible contaminants. Details of the accelerated site characterization field program were provided in the work plan prepared for the U.S. Army Corps of Engineers.

**Comment No. 20, Section 4.26.4, page 4-135, 2nd bullet**

*The text is confusing and needs to be rewritten.*

**Response**

The text (Section 4.26.4, 2nd bullet) has been revised in the Revised Final Phase I EI Report (September 1995).



**Comment No. 21, Section 4.28, page 4-138**

*This site includes 24 locations, most of which were used for vehicle maintenance. Of the 24 locations, 17 discharge to a POTW. The seven remaining locations go to the ground surface, a storm sewer, have no identified discharge connection, or are pumped out. The recommendations in the report are to sample sediments for the locations not connected to the POTW and to evaluate exposure pathways and assess risks. This is unacceptable. The locations which are not connected to the POTW or pumped out should be connected to the POTW or taken out of service. None of these should be allowed to continue to discharge into the storm sewer, onto the ground, or to an unknown outlet.*

**Response**

The Army has removed from service all wash racks, grease racks, and oil/water separators that were not connected to POTWs. The Army is planning on taking interim corrective actions at the respective locations that were not connected to the POTW. The text has been revised accordingly.

**APPENDIXES**

**Comment No. 22, Appendix C, page 10**

*The assumption that all groundwater samples represent the same statistical population is not justified. The analysis of distribution and variance (per EPA Interim Final Guidance, 1989) should be performed prior to accepting this assumption.*

**Response**

The Army did not assume that the analytical results for the background groundwater samples were from one population without justification. The background groundwater samples were likely collected from the same statistical population because they were collected during one sampling round from wells completed in the same shallow unconfined aquifer system. However, the Army was concerned that the analytical results for groundwater samples collected from wells MW16, MW17, MW24 and SMBKGMW006 may have been affected because of their proximity to a former landfill. Consequently, the Army evaluated the assumption that the analytical results for the background groundwater samples were from one population, by comparing the analytical results for groundwater samples collected the four suspected wells to the analytical results for the groundwater samples collected from the remaining background wells. The comparison included the use of box plots and analyses of variance. Because the comparison indicated the two populations were present analytical results for groundwater samples collected from monitoring wells MW16, MW17, MW24 and SMBKGMW006 were excluded from the subsequent background concentration calculations.

However, at the direction of IDEM, the Army did not perform a statistical analysis to identify background analyte concentrations for the Revised Final Phase I EI Report (September 1995). The statistical evaluation at background concentrations (former Appendix C) has been deleted from the Revised Final Phase I EI Report (September 1995).

**Comment No. 23, Appendix C, Table C3**

*This table is confusing. Explanations are needed.*

## **Comments and Responses**

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*It should be explained why the standard deviation values for the "unknowingly" distributed data were calculated. Commonly, standard deviation is a variance of the data around the mean value in normal distributions (also lognormal and otherwise normal).*

*The units indicated in the table are suitable for the soil analysis (Ug/L). The results should be recalculated per Kg of the solid matrix in dry weight.*

### **Response**

At the direction of IDEM, the Army will not perform a statistical analysis to identify background analyte concentrations for the Revised Final Phase I EI Report (September 1995). The table referenced in this comment has been deleted from the report.

### **Comment No. 24, Appendix C, Table C6**

*Same concerns as Table C3.*

### **Response**

Please see the response to Appendix C, Table C3.

### **Comment No. 25, Appendix C, Table C9**

*Same concerns as Table C3.*

### **Response**

Please see the response to comment on Appendix C, Table C3.

### **Comment No. 26, Appendix D**

*There are no analytical results for the groundwater present in Appendix D. The data should be attached to the document for the review.*

### **Response**

Analytical results for groundwater collected from EI Sites 1, 3, and 4 are presented in Tables D2, D4, and D6, respectively (Final Phase I EI Report, July 1994). (EI Sites 1, 3, and 4 are the only EI Sites where groundwater was sampled.) Analytical results for background groundwater samples are presented in Appendix D of the Revised Final Phase I EI Report (September 1995).

### **Comment No. 27, Appendix E**

*The overall quality assessment of the groups of data is presented. There is no QA/QC discussion on the sample by sample basis for each target analyte as required by the National Functional Guidelines for both Organic and Inorganic Data review. The validation of the data can not be done.*

## Response

Data validation of analytical results for samples collected from selected sites was conducted in accordance with the Quality Assurance Project Plan (QAPP) prepared for the FBH investigation. The general summary of the results of the data validation (included in Appendix E) was intended to provide an overall assessment of data quality, and was not specific to the sample level. Data validation worksheets were prepared during data validation. Data validation worksheets provide data validation information specific to individual samples for all FBH Phase I validated analytical results, and were provided to IDEM on November 10, 1994. IDEM reviewed the data validation summary worksheets and announced during the February 15 and 16, 1995 meeting held in Chicago, Illinois, that the Phase I analytical results are acceptable for site characterization and risk assessment.

## Comment No. 28, Appendix D, All Tables

*These tables have some qualifiers (C,D,S,F,P) that were not identified in the table legends nor in Appendix E. Please clarify.*

## Response

Definitions of the qualifiers identified by the reviewer are as follows:

- C Analysis was confirmed
- D Duplicate analysis
- S Non-target analyte analyzed for and detected
- F Sample filtered prior to analysis
- P Results less than reporting limit but greater than instrument detection limit

Explanations for data qualifiers have been added to Appendix C of the Revised Final Phase I EI Report (September 1995).

## Comment No. 29, Appendix F

*The concern with the risk data needs to be explained. The "Target Restoration Goals" do not necessarily match the reference standards indicated in such EPA document as Risk Based Concentrations. It is understood that the site-specific conditions will contribute to the difference in the risk derived data. It is recommended to compare the proposed levels with the reference concentrations and discuss the major discrepancies prior to implementation of the remedial plans.*

*The "Target Restoration Goals" are absent for chemicals such as Lead, Mercury, PAH's, etc. This should be addressed and corrected.*

## Response

Target restoration goals were developed in association with the Phase I Screening Risk Evaluation and Screening Hazard Evaluation. As noted in response to Comment No. 16, at the direction of the regulatory agencies, the Phase I Screening Risk Evaluation and Screening Hazard Evaluation will not

## **Comments and Responses**

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be included in the Revised Final Phase I EI Report. Accordingly, TRGs have been removed from the Phase I EI Report.

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
REGARDING THE FINAL PHASE I ENVIRONMENTAL INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA,  
July 18, 1994**

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS  
REGARDING THE FINAL PHASE I ENVIRONMENTAL INVESTIGATION  
REPORT FOR FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA,  
July 18, 1994**

**GENERAL COMMENTS**

*I have reviewed the above referenced report for this base and have the following comments. I did not review the statistical analysis of this background data as this is a RCRA and not a Superfund requirement. However, I am confused as to how the UTL is in some cases greater than the maximum detected value. I am also disappointed to find my previous comment of including all data hits regardless of their comparison to background in the summary tables. Random checks with Appendix D and site summary tables indicate a number of discrepancies which bring into question whether this data, that was left out of the summary tables, was evaluated in the risk assessment. These issues will need to be resolved in our meeting on the 31st.*

**Response**

The Upper Tolerance Limit (UTL) is the value below which 95 percent of a given population is expected to occur. Because it is a statistical estimate for small data sets, it is likely that the UTL will exceed the maximum reported detected value, as it did with background samples collected at Fort Benjamin Harrison (FBH).

Because inorganic compounds occur naturally, only those concentrations exceeding background concentrations are provided in the site summary tables. All analytical results (detects and nondetects) for samples collected at EI sites are provided in Appendix D of the Final Phase I Environmental Investigation (EI) Report (July 1994).

The Army is unable to identify discrepancies between the analytical results reported in Appendix D and the analytical results reported in the respective Section 4.0 site summary tables. Analytical results exceeding background concentrations, as defined by UTL values, were identified as chemicals of concern for each EI site. These chemicals of concern are identified in the site summary tables.

Outliers were evaluated in the Final EI Report (July 1994) using Dixon's Test for Outlier Detection. Results from this analysis indicated that in data sets containing one detected value and several nondetected values, the detected value was an outlier. However, HLA overrode the results of the Dixon's test in instances where the detected value was within a factor of five of the reporting limit (i.e., values within five times the reporting limit were not discarded as outliers). This approach was taken to retain low-level background concentrations of compounds that were likely to be present in other background samples, but at concentrations less than their respective reporting limits.

At the direction of the Indiana Department of Environmental Management (IDEM), the Army did not include a statistical analysis to identify background analyte concentrations for the Revised Final Phase I EI Report (September 1995). Background analyte concentrations were provided by IDEM.

**SPECIFIC COMMENTS**

**Comment No. 1, Table 2-3**

AREE 1 - *The PA states there is no evidence of a release. On what is this based, visual inspection? As hazardous materials are stored outside on pallets, it is probably safe to assume that through use, some spillage may have occurred on the ground immediately adjacent. The previous statement regarding no releases at the site should be backed up by a sample in this area.*

**Response**

The Enhanced Preliminary Assessment (PA) (Roy F. Weston, 1992, p. 3-8), states that "no evidence was found of known or suspected major releases or spills of hazardous waste associated with the Field Print Shop (USAHEA, 1987)."

The waste storage area is located on a concrete loading dock and spillage onto unpaved ground is unlikely to occur. Sampling at this location is not appropriate at this time.

**Comment No. 2, Table 2-3**

AREE 2 - *The same probably seems to exist here and there is no sampling to show evidence either way regarding a release. However, I agree with your conclusions, as the most likely exposure route is the drain which goes into the sanitary sewer and would probably be treated down the line. If there ever was a problem here, it is now elsewhere.*

**Response**

No response is required.

**Comment No. 3, Table 2-3**

AREE 4 - *How will the staining areas be addressed. This should be discussed prior to transfer.*

**Response**

Building cleanup for release is not part of the FBH EI. The Army will address this concern separately.

**Comment No. 4, Table 2-3**

AREE 6 - *Same comment as area 4. The cleaning procedure and disposal of any material should be identified.*

**Response**

Building cleanup for release is not part of the FBH EI. The Army will address this concern separately.

**Comment No. 5, Table 2-3**

*AREE 10 - Some sampling should have occurred in the storm drain outfall to rule out a substantial release as staining was noted by the drain, and the storm drain water is not treated. I agree with the sampling of all outdoor areas especially Building 422.*

**Response**

The floor drain near the POL Accumulation Area in Building 424 will be evaluated to verify that it discharges to the storm sewer, as reported in the Enhanced PA (Roy F. Weston, 1992). If the storm sewer outfall is located, sampling in the outfall area will be conducted as part of the Phase II EI field program for EI Site 28, Wash Racks, Grease Racks, and Oil/Water Separators.

Sampling of outdoor areas at Building 422 (Roads and Grounds Vehicle Maintenance Shop, Solid Waste Management Unit [SWMU] #FBH6) was conducted during the Phase I Resource Conservation and Recovery Act (RCRA) Facilities Investigation (RFI). Results of these activities are provided in the Final Phase I RFI Report.

**Comment No. 6, Table 2-3**

*AREE 11 - The 5th November incident is far too sketchy to rule out not sampling the ditch. This should be done.*

**Response**

The Army will review available information regarding the November 5, 1988, incident to assess whether additional sampling at Building 33 should be included in the Phase II EI.

**Comment No. 7, Table 2-3**

*AREE 24 - Another round of MW sampling should be done to rule out the presence of lead and Barium (I think this was proposed).*

**Response**

The Army has periodically monitored groundwater quality at the closed West Sanitary Landfill. The Army has arranged for the U.S. Geological Survey to set up a groundwater sampling program to continue groundwater monitoring at the closed West Sanitary Landfill.

**Comment No. 8, Table 2-3**

*AREE 29 - More investigation is needed. Conclusions cannot be drawn from observing the area from the fence, especially regarding staining and drainage.*

**Response**

The Base Closure Team has evaluated the Ammunition Storage Area and has determined that further investigation of this area will not be required.



**Comment No. 9, Section 3.2.2**

*I see 6 soil boring locations, are you including a MW in the count of 7? Please clarify.*

**Response**

The number of background soil borings as described in Section 3.2.2 is not very clear. Originally, seven background soil borings were proposed. However, because of shallow water table conditions at some locations, samples could not be collected at the target depths and meet the sampling condition of collecting the samples above the water table. Therefore, additional borings were drilled at other locations where the water table was deeper to collect the additional subsurface soil samples for statistical analysis. Section 3.2.2 has been revised to clarify the number and location of background soil samples.

**Comment No. 10, Section 4.1.5**

*I generally agree with your conclusion for no further action. However, there is no metals analysis on groundwater and soil data shows elevations of Thallium, Beryllium, Lead, Selenium and Vanadium. It is doubtful that the concentrations found here would cause a risk in either media, but it is hard to say for certain without the data. As Vanadium was not included in the summary table, was it included in the risk assessment?*

**Response**

EI Site 1 was used as an Auto Craft Shop. It is unlikely that the slightly elevated concentrations of thallium, beryllium, lead, and selenium are attributed to any activities at the site. Rather, these are thought to represent concentrations of naturally occurring metals in soil. Therefore, a groundwater investigation to assess groundwater metals concentrations is not warranted. However, the recommended Phase II EI activities for this site include resampling of groundwater to confirm the absence of VOCs in groundwater collected from this site. (Section 4.1.4 of the Revised Final Phase I EI Report, September 1995).

Table 4.3 of the Final EI Report (July 1994) indicates that vanadium was not detected above the background UTL. Because vanadium was below the UTL, it was not included in the screening risk assessment and is not included in the summary table. However, at the direction of IDEM, the previous statistical analysis of background sample analytical results has been deleted from the Revised Final EI Report (September 1995). Background screening is based upon concentrations provided by IDEM.

**Comment No. 11, Section 4.3**

*It is unclear why the groundwater samples were not analyzed for metals. Please explain. Groundwater at the site is noted to have a predominantly northwesterly flow direction. For this site, the direction of groundwater is noted as toward the northeast. Is this an error? Could the reported flow direction be a result of difficulties experienced while installing monitoring wells at this site? Again there are a number of elevated metals here, do they have some peculiar characteristic that would preclude their potential migration into groundwater?*

**Response**

The sampling program at this site was presented in the Phase I Technical Sampling Plan (TSP). EI Site 3 is a former PX gasoline station. Potential contamination at the site would most likely result

from the storage of fuels and waste oils or solvent usage. The Army addresses the storage of fuels and waste oils in underground storage tanks (USTs) under other environmental programs. Therefore, the former USTs were not included in the Phase I EI investigation at the site. The Phase I EI focused on possible disposal of waste oil and solvents through soil-gas sampling. Subsurface soil and groundwater sampling were to be implemented if the soil-gas sampling indicated a potential for subsurface contamination. Although waste oil may contain metal contaminants, these metals are unlikely to be released from the waste oil into groundwater as dissolved metals. Therefore, analysis of groundwater samples was limited in the Phase I EI TSP to organic contaminants (volatile organic compounds [VOCs] and total petroleum hydrocarbons [TPH]).

The reported groundwater flow direction is not an error. Water-level measurements obtained on February 14, 1994, indicate (Final Phase I EI Report, p. 3-38) that basewide groundwater flow in the unconfined flow system is generally to the northwest with local variations. Portions of Site EI 3 are located on the side of a hill near a small stream. As a result, the shallow groundwater in this area may be influenced by the site topography. Measured water levels in the four monitoring wells at EI Site 3 indicated that groundwater flow was to the northeast toward the stream.

There is no peculiar characteristic that would preclude metals in the soil from migrating into groundwater. However, with the possible exception of lead, which is below EPA recommended screening levels, there is no reason to believe the metals found during the Phase I EI are not naturally occurring or that the metals are not being released at natural rates to groundwater.

Metals were detected slightly above background concentrations in some subsurface soil samples, primarily in the sample collected at 6.5 feet in Boring EI003SB001. Lead was the metal identified most frequently above background in the range of 34.6 to 88.1 milligrams per kilogram (mg/kg). (The recommended screening level for lead in soil is 400 parts per million [ppm].) (OSWER Directive 9355.4-12, 1994). Other metals detected at the site include arsenic, barium, beryllium, cadmium, chromium, cobalt, iron, manganese, selenium, thallium, and zinc. These metals were detected less frequently above the established background concentrations and probably are unrelated to known activities at the site. Based on the low concentrations of the metals in subsurface soil, and the absence of organic contamination, additional groundwater sampling at this site for metals analysis is not warranted. However, recommended Phase II EI activities for this site include resampling of groundwater to confirm the absence of VOCs (Section 4.3.4 of the Revised Final Phase I EI Report, September 1995) in groundwater collected at this site.

#### **Comment No. 12, Section 4.4.2.2**

*Were the subsurface soil samples analyzed for pesticides where they had been found in surface soils? If not explain why.*

#### **Response**

Pesticides were not analyzed for in subsurface soil samples where pesticides were found in surface soil because this site was not being investigated for pesticide contamination. Pesticides were analyzed for in a limited number of surface samples coincidentally with the analysis of polychlorinated biphenyls (PCBs) to confirm PCB-screening analysis. Although pesticides were detected slightly above background concentrations, only one pesticide was detected at a level slightly above its corresponding target restoration goal (TRG). The pesticides detected are not considered to be associated with past site activities, but are more consistent with pesticide concentrations detected in other soil samples around the base. However, subsurface soils will be analyzed for pesticides during the Phase II EI. The recommendations will be revised to include these analyses and the text will be revised to indicate that pesticides are not considered to be related to site-specific activities.

**Comment No. 13, Section 4.4.3**

*Why was a residential use scenario considered for groundwater if it is unlikely that future residents would obtain domestic water from this aquifer, rather than from a public supply system?*

**Response**

The most conservative assumption was used for the screening risk evaluation.

**Comment No. 14, Section 4.4.5**

*Expound on the recommended additional site investigation for this site. Also, groundwater should probably be analyzed for pesticides.*

**Response**

The Phase II EI will include analyzing groundwater samples for pesticides. Recommended Phase II EI activities for this site are provided in Section 4.4.4 of the Revised Final Phase I EI Report (September 1995). The details of the additional site investigation will be provided in the Phase II EI TSP, which will be submitted for agency review.

**Comment No. 15, Section 4.5.5**

*I believe borehole 4 is above Indiana cleanup limits and therefore some action is required. In addition, if diesel fuel was encountered in the soils, is it not also likely that it could be present in the relatively shallow groundwater? A groundwater investigation is believed necessary to fully assess impacts to all potentially effected media, unless residential GW use can be ruled out and it can be shown that this formation is not hydraulically connected to the principle water bearing formation.*

**Response**

The concentration of diesel fuel in one subsurface soil sample collected from soil Boring EI005SB003 was 520 mg/kg and is greater than the 100 mg/kg total petroleum hydrocarbon maximum level of soil contamination allowed to remain onsite based on IDEM clean-up levels (IDEM, 1993). Nearby monitoring wells will be sampled during the Phase II field investigation to assess any impact to groundwater from activities at Site EI4. The details of this groundwater evaluation will be presented in the Phase II EI TSP. The text has been revised to include a discussion of the occurrence of diesel fuel and a recommended evaluation of the potential for groundwater contamination.

**Comment No. 16, Section 4.6.5**

*Some organic soil sampling needs to be done here as well since POL and other chemicals were stored here. In addition, Arsenic and Lead seems to be elevated and should be examined.*

**Response**

Additional organic soil sampling for polynuclear aromatic hydrocarbon (PAH) compounds is recommended in the Final Phase I EI Report (July 1994). Although the purpose of this sampling is related to identifying PAH compounds related to coal storage, many of these compounds are also found in petroleum, oils, and liquids (POLs).

The POLs and other chemicals identified in Section 4.6.1.1 of the Final Phase I EI Report (July 1994), Records Review, were incorrectly included with this site, the Former Coal Storage Yard, which is located near the Heating Plant Building (Building 2). In the Enhanced PA (Roy F. Weston, 1992), the Former Coal Storage Yard (AREE 30) and the Heating Plant Building (Building 2, AREE 13) were evaluated separately. For the Former Coal Storage Yard (AREE 30), the Enhanced PA recommended additional soil sampling with analysis for metals and pH. This recommendation was implemented during the Phase I EI. For the Heating Plant Building (AREE 13), the Enhanced PA recommended that, prior to accessing the property, waste laboratory chemicals and reagents be properly disposed of, and that the remaining laboratory and water treatment chemicals be removed and all exposed surfaces be cleaned. The information on POLs and other chemicals was taken from the description of activities at the Heating Plant Building (Building 2, AREE 13) and is not related to the former coal storage yard. This information regarding the Heating Plant Building has been removed from the Revised Final Phase I EI Report (September 1995).

Arsenic exceeded background concentrations in one subsurface sample (Final Phase I EI Report, July 1994). However, the screening risk evaluation indicated that incremental risk from arsenic is less than the subsurface soil criteria (carcinogenic risk of less than  $1 \times 10^{-5}$  and a hazard index of 2.0). The slightly elevated concentration of lead is not considered indicative of contamination associated with site activities. As stated in the Enhanced PA (page 3-49), background concentrations of chromium, iron, lead, and zinc tend to be higher in glacial tills than in other lithologic formations. In addition, lead was detected at a maximum concentration of 184 mg/kg, which is below the recommended screening level of lead in soil (400 ppm) based on EPA guidance (OSWER Directive 9355, 4-12, 1994).

#### **Comment No. 17, Section 4.7.2.1 and 4.7.2.2**

*Is it correct to state that dissolved metals including antimony, arsenic, calcium, copper, iron, magnesium, manganese, potassium, sodium, and zinc are commonly found throughout the installation are not necessarily related to site activities? Should the statement be taken to mean that these metals were present at concentrations at or near background? Note that the last line on page 4.45 indicates that the concentration of arsenic and several pesticides appear to confirm that the basement had been used for pesticide storage. Is it likely that some of the previously listed metals may have resulted from pesticide storage activities?*

#### **Response**

Dissolved metals in surface-water samples were detected near or less than background levels at Site SM18. These concentrations are consistent with those detected throughout the installation. Therefore, they are not interpreted to be associated with site-related activities. The text will be revised to reflect this clarification. The presence of arsenic at high concentrations in one sediment sample may be related to pesticide storage.

#### **Comment No. 18, Section 4.7.3**

*The screening Risk evaluation should be deferred until additional soil sampling has been conducted, and the recommended groundwater investigation is completed.*

#### **Response**

A screening risk evaluation was not performed for this site because samples were collected from the basement of Building 27. However, during the February 15 and 16, 1995, meeting among the Army, IDEM, Region V EPA, and their consultants, the Army agreed to not include the screening risk

evaluation in the Revised Final Phase I EI Report (September 1995) at the direction of the regulatory agencies.

**Comment No. 19, EI Site SM22**

*It is unclear why the sampling activities were conducted approximately 120 feet west of Building 811 and 812. Was this the general direction and extent of the firing range?*

**Response**

Sampling was conducted along a hill that acts as a backstop for the firing range.

**Comment No. 20**

*Why is the cyanide detect considered a laboratory artifact? Was it coincidental that cyanide analysis was requested, or would cyanide be typically associated with firing range contaminants. The downstream extent of sediment metal contamination has not been sufficiently delineated to determine any kind of action without further sampling. Is there any potential for groundwater contamination by metals to exist at the site, given the reported elevated concentrations in the surface soil? Would other data such as soil pH and other soil characteristics influence the potential migration of metals into the underlying groundwater?*

**Response**

The cyanide detect is considered a laboratory artifact because it was detected in only one of the 11 surface soil samples collected at a value close to the reporting limit. The analysis of cyanide is coincident to the metals analysis requested. The Naval Facilities Engineering Command sponsored a study involving assessment of small arms ranges. In the resulting report, it was concluded that elevated levels of metals in soil occur at the ranges. Cyanide was not noted as a chemical found in the soil at these sites (Heath, 1991).

Basewide sediment samples were collected at the confluence of Schoen Creek and Lawrence Creek, downstream of EI Site SM22 (RFI, Section 4.8.1.2). Additional downstream sampling will be evaluated during preparation of the Phase II work plans for this project, if necessary.

The Army acknowledges that the potential for groundwater contamination at this site exists given the high concentrations of metals in soil. The Army will develop a plan for evaluating this potential, the details of which will be presented in the Phase II TSP. The recommendations presented in the EI will be revised accordingly.

Soil characteristics such as soil pH do influence the potential migration of metals into groundwater. Some metals (e.g., lead) are more mobile under low pH conditions and relative immobile under neutral pH conditions.

**Comment No. 21, Section 4.12.1**

*What is the purpose of the metal loading calculations? What did they show?*

## Response

The metals loading calculations were used to identify potential sources of metals contamination contributing to surface water or streams. The results of these calculations presented in the Revised Final Phase I EI Report (September 1995) indicate (Section 4.12.2.4) that EI Site SM23 (State Police Pistol Range) is a source of lead and copper in surface water in the adjacent stream.

## Comment No. 22, Section 4.12.2.3

*Mg levels seem to be very high. Do you have any explanations for this?*

## Response

Magnesium is a common constituent of geologic metals and a major ion in natural water. Magnesium is not a regulated substance and there is no regulatory guidance for magnesium in environmental media. In the September 14, 1994, meeting among the Army, IDEM, and Region V EPA, it was agreed that four metals (aluminum, calcium, magnesium, and potassium) did not need to be addressed in the RFI and EI at FBH.

## Comment No. 23, Section 4.12.5

*Again, the recommendations for remediation of affected media will be difficult as volumes and extent of contamination have not been sufficiently delineated. The extent of contamination must be completely characterized or the FS won't address all of it.*

## Response

The Army is examining field screening techniques to further evaluate the extent of metals contamination in soil during the Phase II EI field program. An evaluation of the potential for groundwater contamination will be conducted during the Phase II EI. The details of these investigations will be provided in the Phase II EI TSP. The recommendations in Section 4.12.5 have been revised accordingly. The extent of contamination in sediment will be evaluated during the Phase II EI.

## Comment No. 24, EI Site SM24

*Again, have you sufficiently determined the extent of contamination? Iso-concentration drawings would help. Does CMS refer to a RCRA Corrective Measure Study?*

## Response

Further investigation of historic activities at FBH by the Army indicates that the firing ranges in the vicinity of the skeet/rifle range are more extensive than was known when the Phase I TSP was prepared. As a result, it appears that the extent of contamination has not been fully characterized. Therefore, it is recommended that additional surface soil samples be collected at the site during the Phase II EI. The details of this sampling will be presented in the Phase II EI TSP. The text (Section 4.13.4, Revised Final Phase I EI Report, September 1995) has been revised to include this recommendation.

The acronym, CMS, does refer to a RCRA corrective measure study. Because the site is now an EI site, an alternatives analysis will be performed at sites where significant levels of contamination have

been identified. The text of the Revised Final Phase I EI Report (September 1995) has been revised accordingly.

**Comment No. 25, EI Site SM25a**

*A composite of trench soil sent in for general analysis would be more revealing than a visual determination. I think you would be hard pressed to support a statement of no further action on a visual determination. You should concentrate on whether there was any basis in the first place to believe hazardous substances were disposed of here.*

**Response**

Excavation of this site does not appear to be warranted. Based on the historical records search and visual inspection, there is no reason to suspect that hazardous materials or substances were disposed of by the Army as waste materials at the site as indicated in Section 4.14 of the Revised Final EI Report (September 1995).

**Comment No. 26, Section 4.15.5**

*The PAH levels are not significant here. I would concentrate further study on the extent and exposure attributed to lead. Also, how do you average 1 out of 6 PAH concentrations in the risk screening evaluation?*

**Response**

The Army agrees that the PAH levels are not significant and will reassess the recommended further evaluation of PAH levels in soil. The highest concentration of lead detected at this site is 123.5 mg/kg. Based on OSWER Directive 9355.4-12, Revised Interim Soil Lead Guidance for CERCLA and RCRA sites (EPA, 1994), the screening level for lead in residential soil is 400 ppm. Using the screening level in this directive, lead is not considered to be a problem at this site.

The detection of PAH compounds in one sample (SM25bSS001) warrants an assessment of the risk associated with these compounds. Because exposure is based on average site conditions, a value of one-half of the quantitation limit was used for samples below the quantitation limit to assess an average concentration for the site. These five values were added to the detected concentration for the one sample and averaged. The average value was used in the screening risk evaluation.

The Phase I investigation conducted at this site was discussed during the February 15 and 16, 1995, meeting held in Chicago, Illinois. During this meeting, it was agreed by the meeting participants that additional field work will be conducted at this site located at the FBH golf course, following an accelerated schedule, to further characterize possible contaminants. The accelerated field work at the Golf Course Sites was conducted during summer 1995.

**Comment No. 27, Section 4.16.4**

*How do you conclude that subsurface metal exceedences are not site related? Al, As, Be, Cr, Fe, Pb, V are all above background. How do you explain this? Is there a potential for these compounds to leach to GW?*



**Response**

As discussed in Section 4.16.2.3 of the Final EI Report (July 1994), except for lead concentrations (546.00 mg/kg) in one soil sample, the metals concentrations in the subsurface soil were less than two times their respective background subsurface soil concentrations. These metals are likely to be present in groundwater. With the exception of beryllium, these metals were detected in basewide background groundwater samples.

**Comment No. 28, EI Site SM25d&e**

*In the absence of data, it is difficult to justify no further action. See comment of EI site SM25a.*

**Response**

Based on the historical records search and visual inspection, there is no reason to suspect that hazardous wastes or substances were disposed of at this site. Therefore, no further action is recommended as indicated in Sections 4.17 and 4.18 of the Revised Final EI Report (Summer 1995).

**Comment No. 29, Section 4.19.4**

*Since the metallic anomalies appear to be left undetermined, I looked very closely at the data to make sure contamination could not be linked to these buried objects. As stated above, after inspecting the raw data table in appendix D, it was disturbing to find that Al, Co and V all exceeded background concentrations but were not listed in the summary table. I then question whether these values were factored into the risk assessment. Please confirm. I have also found similar discrepancies in the sections that followed. Previous sections may also be similarly affected.*

**Response**

Section 4.19.4 of the Final EI Report (July 1994) provides conclusions from the field investigation at EI Site 25f, one of the historic military sites. At EI Site 25f, cobalt is listed in Table 4.52 as greater than background in one subsurface soil sample. Cobalt was not included in the screening risk assessment because toxicity values (i.e., an oral reference dose) are not available for cobalt. Comparing the data in Appendix D for aluminum and vanadium to the UTL listed for subsurface soil in Table 3.17, aluminum and vanadium do not exceed the UTL. Therefore, these were not included in the summary of analytes for this site (Table 4.52) or in the screening risk assessment.

**Comment No. 30, Section 4.22.5**

*It wouldn't hurt to look at PAHs, but on the surface they don't seem too significant. However, Mg is very elevated and was completely ignored. Please explain the high values in boreholes 1,2 and 3.*

**Response**

The Army will reexamine the recommendation to further assess the extent of PAH compounds in soil during preparation of the Phase II EI workplan. With regard to magnesium, there is no regulatory guidance available and no toxicity factors that can be used to evaluate magnesium concentrations. Additionally, U.S. Geological Survey (USGS) data for Indiana (Shacklette and Boerngen, 1984) indicate that magnesium in surficial materials ranges as high as 60,000 ppm. Magnesium concentrations detected in Borings 1, 2, and 3 are considered to be naturally occurring in the soil and not likely be associated with any activities that occurred at the site. In the September 14, 1994, meeting



among the Army, IDEM, and Region V EPA, it was agreed that four metals (aluminum, calcium, magnesium, and potassium) did not need to be addressed in the RFI and EI at FBH.

### **Comment No. 31, EI Site SM25k**

*Section 4.24.3 states that no further action is recommended while Section 4.24.5 recommends a baseline risk assessment. Which is correct?*

#### **Response**

Both statements are correct. Section 4.24.3 of the Final EI Report (July 1994) recommends no further action based on the results of the screening hazard evaluation, which assessed potential ecological risks. However, because the human health risks exceed the public health screening criteria, a baseline risk assessment to evaluate potential human health risks is recommended.

### **Comment No. 32, Section 4.26.4.**

*Are you going to look into the metal anomalies in the next phase? This would seem to make sense since you are going back to do more sampling anyway.*

#### **Response**

The Army will consider investigation of possible metal anomalies identified by the Phase I EI geophysical survey conducted at EI Site SM26 (Former Sewage Treatment Plant, West of Building 674) as part of the Phase II EI field program. The details of the proposed activities will be provided in the Phase II EI TSP.

### **Comment No. 33, Section 4.28.4**

*The PA recommended soil borings. Why was that recommendation not brought forward here. See table 2-3 AREE #9. The soil sampling should include VOCs as this section mentions the possible use of solvents in wash rack areas.*

#### **Response**

The recommendations in Section 28.4 of the Revised Final Phase I EI Report (September 1995) have been revised to include soil borings near the oil/water separators where leaks are suspected, and surface or subsurface soil samples near grease racks that are unpaved. Phase II EI evaluation of wash racks, grease racks, and/or oil/water separators that did not discharge to a publicly owned treatment works will be conducted. The details of this evaluation will be provided in the Phase II EI TSP.

**REFERENCES**

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Roy F. Weston, Inc. 1992. Deliver Order A, enhanced preliminary assessment, Fort Benjamin Harrison, Ind. Prepared for U.S. Army Toxic and Hazardous Material Agency, Aberdeen Proving Ground, February.

Phase I EI Report  
IN4 210 090 003  
September 18, 1995

**RESPONSES TO U.S. ARMY ENVIRONMENTAL CENTER COMMENTS  
REGARDING THE FINAL PHASE I ENVIRONMENTAL INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA,  
July 18, 1994**

**RESPONSES TO U.S. ARMY ENVIRONMENTAL CENTER COMMENTS  
REGARDING THE FINAL PHASE I ENVIRONMENTAL INVESTIGATION REPORT FOR  
FORT BENJAMIN HARRISON, MARION COUNTY, INDIANA,  
July 18, 1994**

**GENERAL COMMENTS**

**Comment No. 1**

*Please make sure all recommendations provided in Section 4 are consistent with the recommendations provided in Table 5.1.*

**Response**

Table 5.1 has been revised to be consistent with the information and recommendations provided in Section 4.

**Comment No. 2**

*Please make sure that all references to any wetlands study conducted by the Corps of Engineers have been removed from the document.*

**Response**

References to wetlands studies conducted by the Corps of Engineers have been removed from the Revised Final Phase I EI Report.

**Comment No. 3**

*In the next version of the document, please provide an executive summary. This summary should be written in sixth grade level English and understanding.*

**Response**

An executive summary has been included in the Revised Final Phase I EI Report.

**Comment No. 4**

*Please clear up the confusion about Buildings 604 and 605 at the pesticide storage area. Building 604 is the large building and Building 605 is the small building which is the pesticide mixing and storage area. No pesticides were stored or mixed in Building 604, however, the pesticide office was located in Building 604.*

**Response**

HLA has reviewed the historical uses of Buildings 604 and 605 during discussions with Mr. Tom Shafer of the FBH Environmental office. Mr. Shafer indicated that Building 604 is a plumbing shop, and believes it has always been used for that purpose. Building 605 was a transformer station from the time it was built in 1903 until an unknown date. It has also been used as a pesticide shop. The Revised Final Phase I EI report has been revised to clarify the past uses of these respective buildings.

**Comment No. 5**

*Page 1-1 , second paragraph; I do not understand the need to include this paragraph in the document. This document is public property and certainly the public should be able to rely on the information contained in the document and many other government agencies and state agencies should also be able to rely on the information without written consent of Harding Lawson Associates (HLA). Recommend deleting this paragraph from the text.*

**Response**

The Final Phase I RFI Report is indeed a public document and, as indicated in the subject paragraph, can be relied upon by the Army, Region V EPA, and Indiana Department of Environmental Management (IDEM) for the purposes identified in the Army's Phase I Statement of Work. The purpose of the paragraph is to limit HLA's liability from possible misuse or misinterpretation of the information in the Revised Final Phase I RFI Report in the future by unknown third parties.

**Comment No. 6**

*Table 2.3, AREE 10; Building 424 should also be included in the description/location column.*

**Response**

Building 424 has been added to the description/location column for AREE 10 in Table 2.3.

**Comment No. 7**

*Page 4-112, Section 4.21.1.2, eighth sentence; please delete this sentence, it is identical to the following sentence.*

**Response**

The duplicate sentence has been deleted.

**Comment No. 8**

*Page 4-115, Section 4.21.3, last sentence; this sentence is inconsistent with the recommendations provided in Section 4.21.5. Please Clarify.*

**Response**

The two sentences were not inconsistent. The last sentence in Section 4.21.3 indicates that no further action was required based upon the screening hazard evaluation, which is an ecological screening evaluation. The preceding screening risk evaluation (human health screen) identified possible health concerns. The recommendations in Section 4.21.5 of the Final Phase I EI Report are based upon the screening risk evaluation. Information pertaining to the screening risk evaluation, as requested by the Indiana Department of Environmental Management and the U.S. Environmental Protection Agency, Region V, is not included in the Revised Final Phase I EI Report.

However, Sections 4.21.3 and 4.21.5 have been revised for the Revised Final EI Report (September 1995). At the direction of the regulatory agencies, the screening risk evaluation (Section 4.21.3) has been deleted and the site recommendations have been revised.

**Comment No. 9**

*Page 4-121, Section 4.22.5, first sentence, last word; this word should be SM25i*

**Response**

The recommended change has been made to the text.

**Comment No. 10**

*Table 4.63; please check this table for accuracy. A discrepancy may exist for Building 127 and 128. Also, this table is inconsistent with Table 4.64, please clarify.*

**Response**

Based on discussions with FBH personnel, listing Building 128 in Table 3.3 of the Enhanced Preliminary Assessment may have been an error. Reference to Building 128 was removed from the Table.

HLA has combined the information formerly found in Tables 4.63 and 4.64 into a new Table 4.80 of the Revised Final Phase I EI Report (September 1995) to reduce inconsistencies.

**Comment No. 11**

*Table 4.64; please modify the table to include whether or not the wash rack/grease rack/oil water separator is in use.*

**Response**

Because of base closure activities and the progressive discontinuation of base services, the status of the wash rack/grease rack/oil water separators during the Phase I field program is no longer accurate. The current status of wash racks/grease racks/oil water separators is not known.

**Response to U.S. Army Corps of Engineers Comments on the  
Final Phase I Environmental Investigation Report,  
Fort Benjamin Harrison, Marion, County, Indiana  
July 1994**

**Response to U.S. Army Corps of Engineers Comments on the  
Final Phase I Environmental Investigation Report,  
Fort Benjamin Harrison, Marion, County, Indiana  
July 1994**

**Comment No. 1, Background Surface Soil Samples begins at Section 3.2.1:**

*The report states that 21 surface samples were taken for background and grouped in accordance with soil type based on the soil survey (3 groups: SS-CB, SS-GS, SS-MS). This seems to be a good approach; however, I could not find any logs with a physical description of the soils types for each sample taken. Just because the area falls in to a soil survey category, it should be field checked. When grouping the subsurface soils for statistical analysis, the grouping should be verified based on physical description and properties of the sample placed into that group. Comparison of sample description, grain size, plasticity, USCS classification should be evaluated to assure the soils are considered the same background group. Some of these surface samples could have been fill. I noticed on some of the boring logs in Volume II of the report that fill was indicated at the surface that contained coal. I have also heard that coal was used at Fort Benjamin for heating in the past and that a lot of fill existed on base that contained coal. I also noticed from table 3.16 that generally 1 of the 7 samples from each of the 3 groups contained SVOCs (specifically PNAs). I contend that the surface soil samples that got hits on SVOCs may have been fill areas that contained coal. There is no way to check this theory because there is no physical description of the soil types for each sample taken. I contend there may be a fourth group of background soil type (that is: fill with coal fragments).*

**Response**

Seven background surface soil samples were collected from each of the three surface soil associations identified in the Enhanced Preliminary Assessment (PA) (Weston, 1992). During sample collection, HLA field personnel classified each background surface soil sample using the Unified Soil Classification System (USCS). Likewise, investigative surface soil samples were also classified based on the USCS for comparison to background samples. A summary of the field USCS classification of the background and investigative surface soil samples is included in Appendix G of the Revised Final EI Report (September 1995). Tables G-1 through G-14 include investigative surface soil descriptions; Table G-15 includes background surface soil descriptions.

The background surface soil sample USCS classifications generally indicate that the majority of the samples consist of clay (CH or CL) or silty clay (CL); one background sample was classified as a clayey silt (ML). (The CH and CL categories were assigned in the field by two different field staff members. One classified the soil as CH, while the other classified the soil as CL. Therefore, these differences may more reflect the field person's bias rather than the differences in the soil at background sites.) The respective USCS classification of the background surface soil samples are generally consistent with their respective soil associations. Background surface soil sample SMBKGSS014, classified as a silty sand (SM), appears to be fill material based on field notes. Therefore, analytical results for this sample will not be used to estimate background surface soil analyte concentrations when background concentrations are recalculated for the Phase II EI. The background surface soil sample descriptions do not indicate the presence of coal fragments in the samples.

**Comment No. 2, Background Subsurface Soil Samples begins at Section 3.2.2**

*This same general comment as above is submitted for the subsurface soils. I don't think it appropriate to only group the soils based on depth or on soil type in accordance with the Soil Conservation Service or based on the USGS Geologic Quadrangles. All these would come into play when grouping the*



*subsurface soils for statistical analysis; however, the grouping should be verified based on physical description and properties of the sample placed into that group. Comparison of sample description, grain size, plasticity, USCS classification should be evaluated to assure the soils are considered the same background group.*

**Response**

Background subsurface soil samples were not grouped by Soil Conservation Service soil type or USGS Geologic Quadrangle mapping. Background subsurface soil samples were grouped, for statistical analysis, into three groups based on the depth at which the respective samples were collected: 0 to 5 feet, 5 to 10 feet, and greater than 10 feet. The decision to group subsurface soil samples by depth was based on evaluation of the background subsurface soil sample's analytical results that revealed differences in analyte concentration with depth.

This approach was selected after HLA staff reviewed the USCS field soil classification of the background subsurface soil samples to assess whether these samples consisted of soil types that may exhibit dissimilar chemical properties (i.e., sand versus fine grained soil [clay and silt]). The USCS subsurface soil classifications indicated the subsurface soil samples consisted primarily of fine-grained soil (i.e., clay and silt). Therefore, soil classification would not be a useful parameter to differentiate soil chemistry.

HLA also reviewed the boring logs for background subsurface soil samples that contained polynuclear aromatic hydrocarbons. Coal fragments were not described in these samples.

**Comment No. 3, General Background Subsurface Soil Samples**

*Table 3.5 indicates the background subsurface sample boring locations were taken to evaluate the subsurface soils of each Soil Association. Yet, Table 3.17 does not distinguish the soil association soil types in the statistical evaluation.*

**Response**

Table 3.5 of the Final EI Report (July 1994) is incorrect; soil borings were not located to evaluate the subsurface soil of each soil association. This table (Table 3.5) has been corrected in the Revised Final EI Report (September 1995). Background subsurface boring locations were selected to assess ambient analyte concentrations in subsurface soil in locations that were believed to be undisturbed by Army activities. As correctly indicated in Table 3.17 of the Final EI Report (July 1994), subsurface soils were grouped into depth categories for statistical evaluation.